Miss Ver

The Southern Textile Association's annual convention, held this month at Myrtle Beach, S. C., is recorded in this issue. A complete account of the proceedings begins on Page 29.

textile bulletin

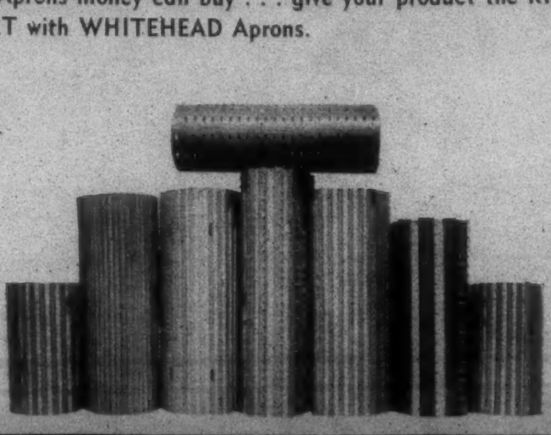
JUNE · 15 · 1946

RESEARCH IN SOCIAL SCIENCE
BOX 539 JULY 46
CHAPEL HILL N C 2644 G

Getting Off to the Right Start

Every cotton textile product gets its "start in life" in the opening and picking room. If it is not a GOOD start, imperfect yarn is the inevitable result no matter how good the carding and spinning or how much care is employed in subsequent processes.

That's why it is so important that your pickers do their job with consistent thoroughness, but this is impossible with inferior Aprons. Make sure that YOUR pickers are equipped with the best Aprons money can buy . . . give your product the RIGHT START with WHITEHEAD Aprons.



☆ OUR APRONS LAST LONGER AND DO THE JOB BETTER ☆

☆ QUICK DELIVERY FOR STANDARD PICKERS FROM STOCK ☆

TROY WHITEHEAD MACHINERY COMPANY
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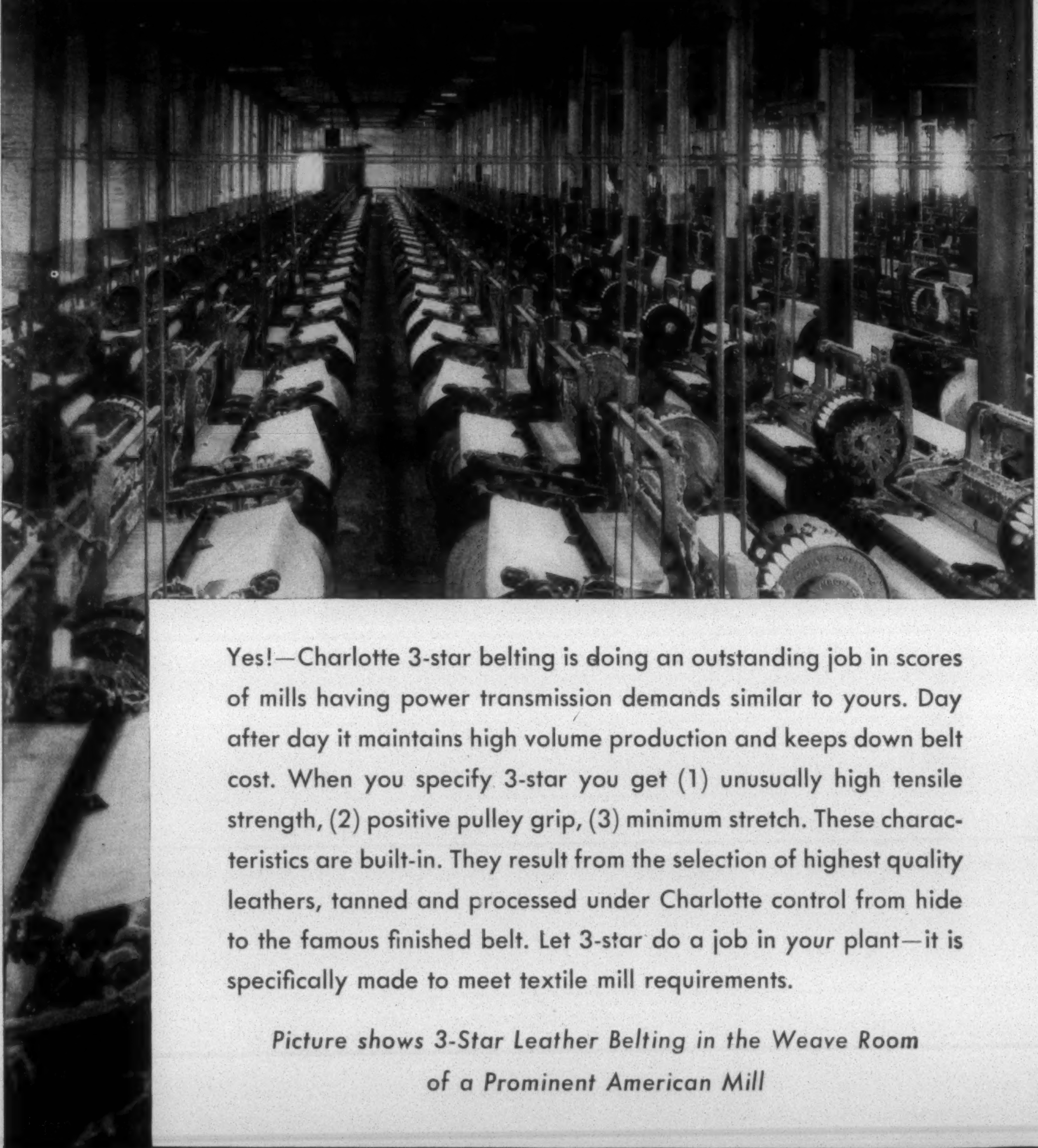
ABP

ABC

ADVERTISING INDEX—PAGE 67

3-STAR LEATHER BELTING



Yes!—Charlotte 3-star belting is doing an outstanding job in scores of mills having power transmission demands similar to yours. Day after day it maintains high volume production and keeps down belt cost. When you specify 3-star you get (1) unusually high tensile strength, (2) positive pulley grip, (3) minimum stretch. These characteristics are built-in. They result from the selection of highest quality leathers, tanned and processed under Charlotte control from hide to the famous finished belt. Let 3-star do a job in *your* plant—it is specifically made to meet textile mill requirements.

Picture shows 3-Star Leather Belting in the Weave Room of a Prominent American Mill

CHARLOTTE LEATHER BELTING CO.

CHARLOTTE, NORTH CAROLINA

Published Semi-Monthly by Clark Publishing Company, 218 W. Morehead St., Charlotte, N. C. Subscription $1.50 per year in advance. Entered as second-class mail matter March 2, 1911, at Postoffice, Charlotte, N. C., under Act of Congress, March 2, 1897.

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Each business has its own peculiar problems.

That is why Commercial factoring is so flexible—a modern method of financing—suited to your particular needs. Immediate working capital is made available through your accounts receivable. Cash is forwarded to you as shipments are made. Yet you sell on your regular terms. Credit losses and collection expense are assumed by us.

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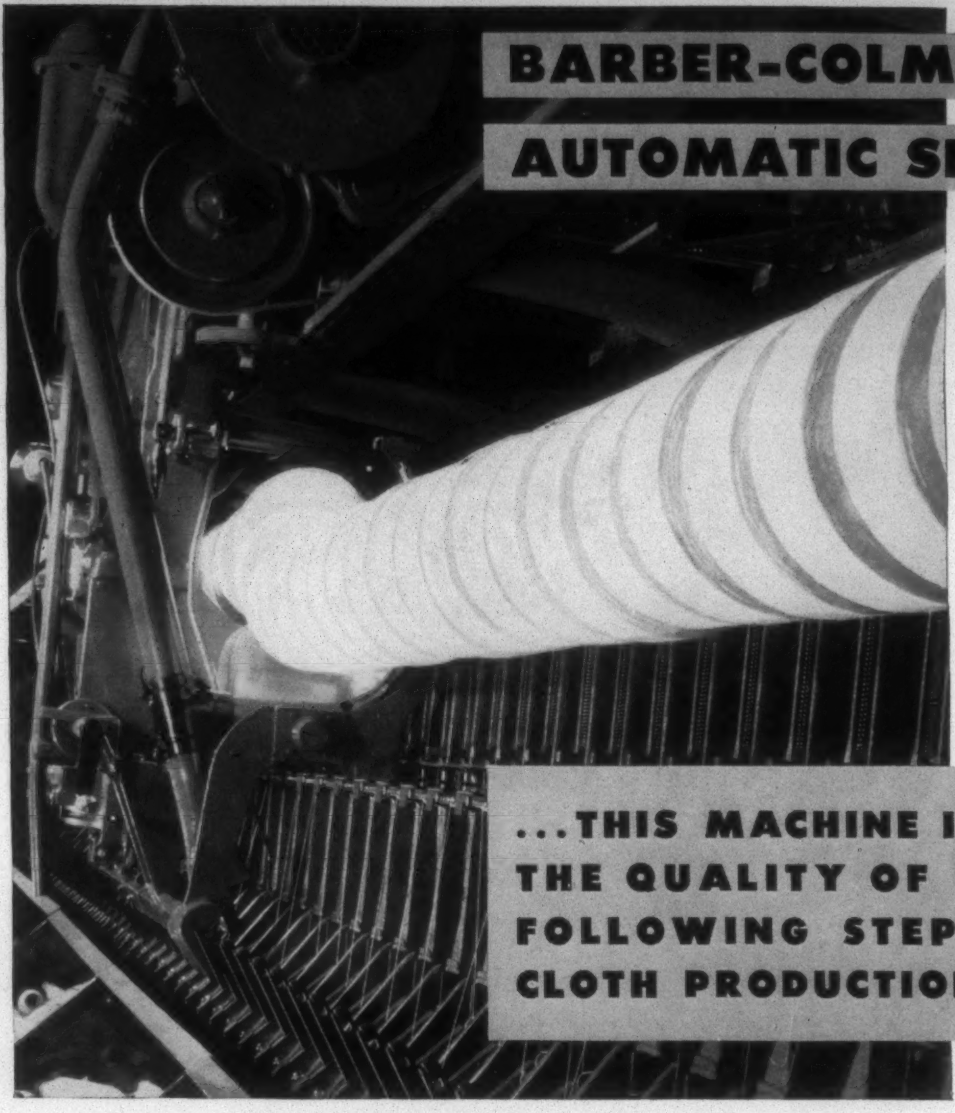
EUGENE G. LYNCH, 80 FEDERAL STREET, BOSTON, MASS.
T. HOLT HAYWOOD, WINSTON-SALEM, NORTH CAROLINA



BARBER-COLMAN AUTOMATIC SPOOLER

...THIS MACHINE IMPROVES THE QUALITY OF EVERY FOLLOWING STEP IN CLOTH PRODUCTION

WHERE Barber-Colman Automatic Spoolers are in use, a better package is delivered to the warper, a better beam to the slashers, better loom beams to the weave shed, and better cloth to the finishers. The quality, accuracy, durability, and uniform production of Barber-Colman Automatic Spoolers are the basis for these valuable improvements: less warper stops, more uniform slashing, fewer loom stops, and less seconds. Any experienced mill man will appreciate machinery which not only increases production and lowers costs, but also gives him very little trouble, requires few repairs and very few service calls, and delivers a uniform package steadily with a minimum of down time. Any mill man can start toward achieving these beneficial results by investigating the possibility of installing Barber-Colman Automatic Spoolers and Super-Speed Warpers in his mill. *Ask your Barber-Colman Representative for data.*

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • DRAWING-IN MACHINES

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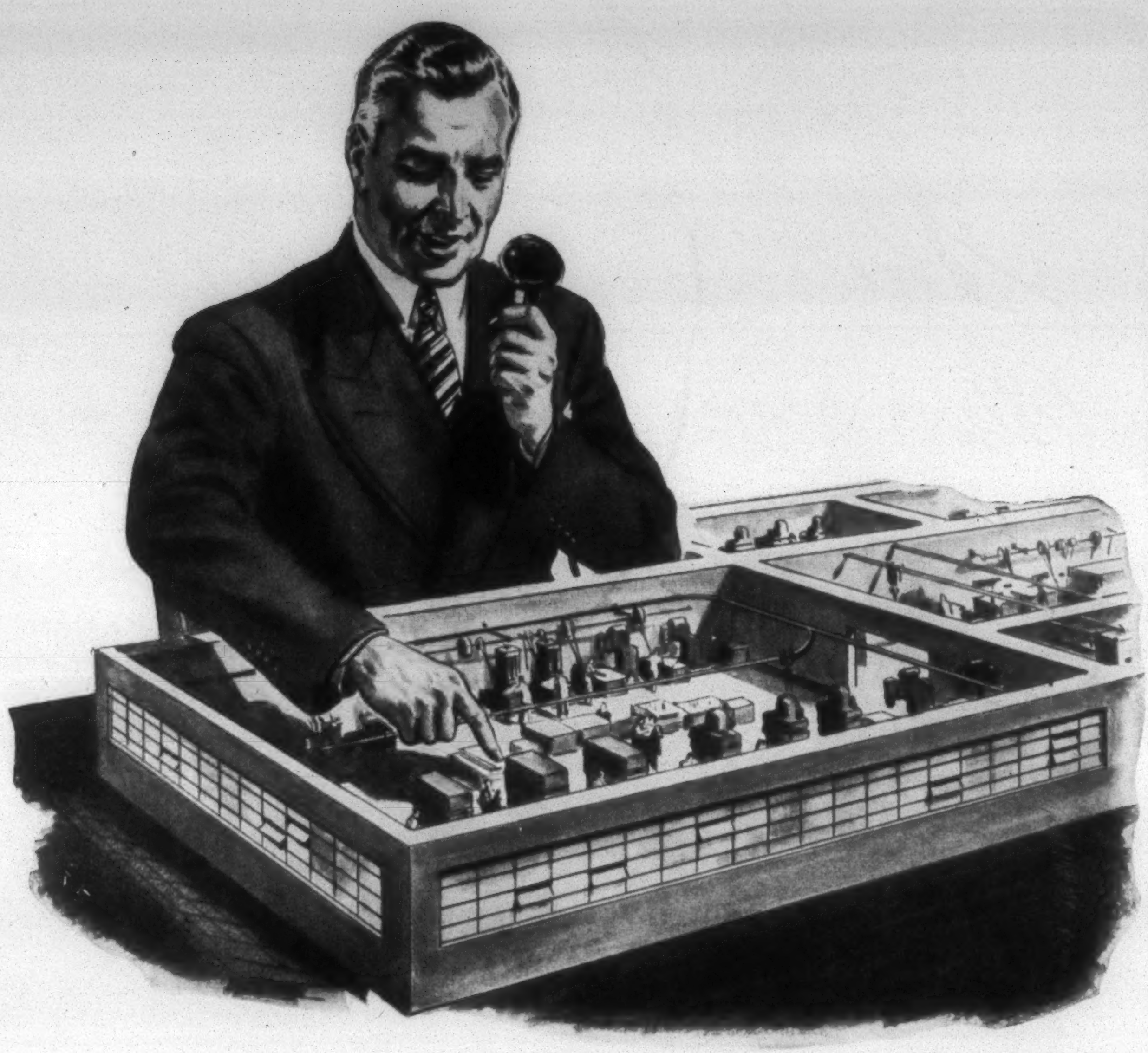

You can locate any man in the plant instantly!

SUPPOSE you want to summon a foreman — or the plant superintendent — or the equipment engineer — or the company doctor — from "somewhere around the plant." What do you do?

It's simple!

That is, it really *is* simple if your plant is equipped with an RCA *Sound System*. Otherwise, you may have to phone, send a messenger, or wait. And if it's a matter that can't wait, it's too bad.

But that isn't all you can do. Broadcasting music with RCA Sound Equipment in your own shops and workrooms lessens worker fatigue — boosts employee morale. And for broadcasting announcements, emergency alarms, and "live," recorded, or radio programs, it has no equal.

Bear in mind that an RCA Sound System can be tailored to your needs without extra expense, no matter what the needs of your plant may be.

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THIS IS NO. 57 OF A SERIES ON

GETTING THE MOST FROM WINDING

LEESONA*

Information about winding designed to show improvements in winding equipment and new ideas in the winding operation

HEAVY DIFFERENTIAL PRESSURE ATTACHMENT
(No. 50 Winding Machine)

For winding heavy ply yarns that require firm and compact packages, the Heavy Differential Pressure Attachment is recommended. This attachment applies heavy pressure at the beginning of winding, then quickly releases pressure as the package increases in size, producing a firm, symmetrical package.

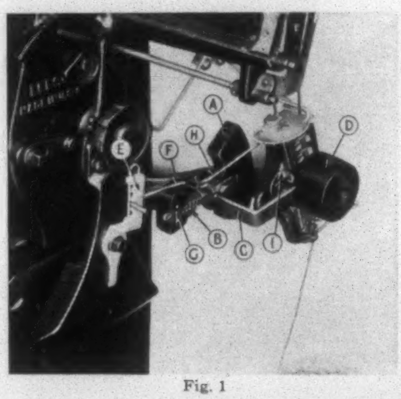

Fig. 1

The device consists of several special parts which replace the standard Differential Tension and Differential Pressure parts. The main part is the Differential Pressure Weight 50-1361 (A in Fig. 1) which has a shank for mounting on the Differential Pressure Lever Stud (B). Attached to the Weight is a U-shaped Auxiliary Differential Pressure Weight Holder 50-1354 (C) on the outer arm of which is assembled an adjustable Auxiliary Differential Pressure Weight (D).

The proper Weights are determined by trial. If the package diameter is 5″ or over, it will be necessary to change to heavier Weights.

The four-place Differential Pressure Adjuster 50-476 (E) is used on the Counterweight. The Differential Pressure Connecting Rod 50-399 (F) which is connected to it controls the movement of the Differential Pressure Weight (A) and the Differential Tension Lever (G). The latter is mounted on the end of the Connecting Rod that projects through the Differential Pressure Weight and is connected with the movable Tension by the Standard Differential Tension Connecting Rod (H).

An Auxiliary Tension Closer Spring 50-3025 (I) is added to the regular Tension Closer because the speed of the heavy material, as the package approaches full diameter, has a tendency to throw open the heavy tensions.

TRAVERSING BUNCH BUILDER
(No. 90 Winding Machine)

The Traversing Bunch Builder is used when it is desirable to flatten and spread out the bunch, particularly with coarse counts of yarn, in order to accommodate a greater-than-ordinary yardage of yarn in the bunch or to prevent excessive piling and tangling.

The attachment consists of the standard Bunch Builder fitted with a hinged Guide (A in Fig. 2) and a Striker Plate (B) that is mounted on the Traverse Bar.

The ratcheting of the Bunch Builder is accomplished in the usual manner by the Ratchet Feed Pawl Arm Stop (C). The Striker Plate carries the Bunch Builder Thread Guide back and forth so that the yarn is traversed instead of piled.

The Bunch Builder Thread Guide is adjustable for two different settings. With the first setting, generally used for fine and medium counts, the Guide lays a bunch 3/8″ wide; with the second setting, for coarser counts (Fig. 3), the bunch is 3/4″ wide.

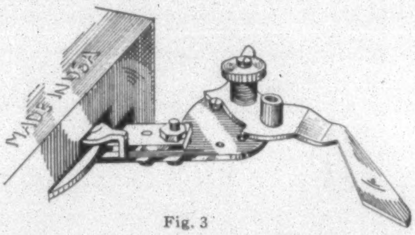

Fig. 3

When the Traversing Bunch Builder Attachment is applied to older machines fitted with Short Cop Formers, they should be replaced with long Cop Formers.

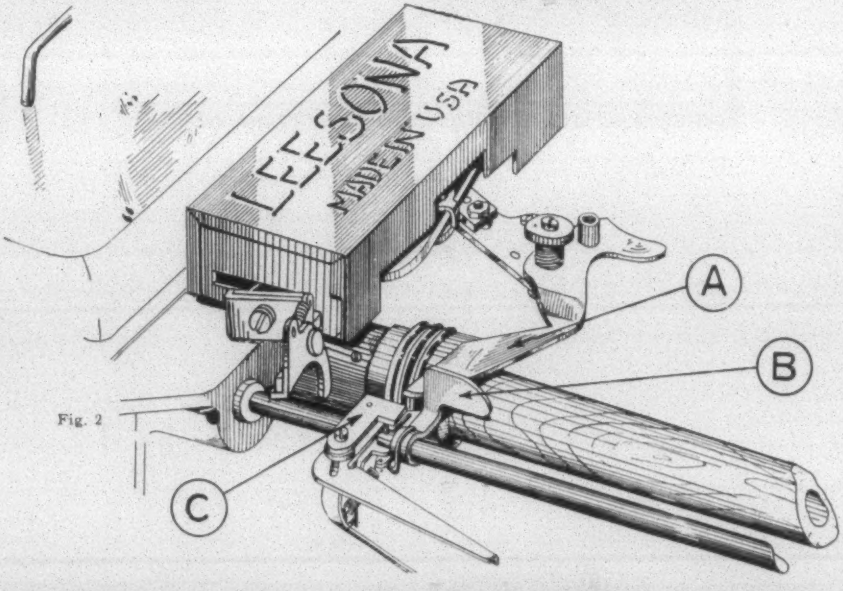

Fig. 2

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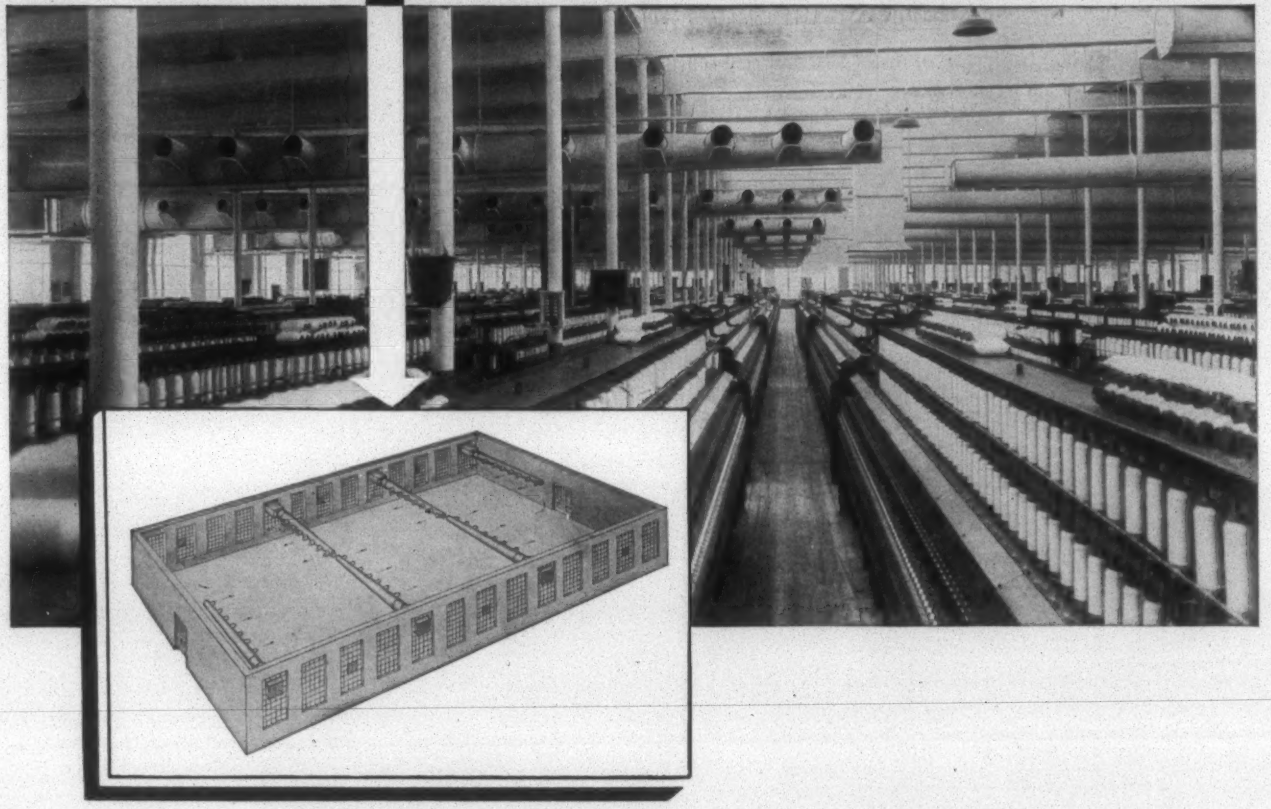
WITH POSITIVE CIRCULATION



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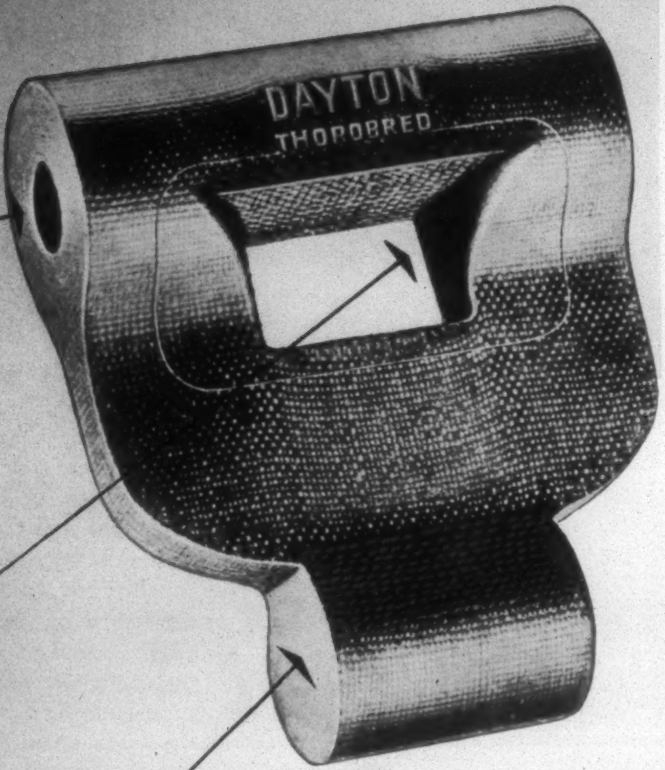
THE *one-two-three* PICKER



HARD AT THE SPINDLE HOLE

The spindle hole of the Dayton Reversible Drop Box Picker is surrounded by extremely hard composition bearing material. It requires no lubrication—won't wear egg-shaped.

SOFT AROUND PICKER STICK

This section around the picker stick hole is a considerably softer composition. Being soft, it cushions the impact of the picker stick and thereby reduces wear on the picker and on the picker stick itself.

STILL SOFTER AT SHUTTLE CONTACT

The shuttle contact area is made of a still softer composition to avoid shuttle point loosening and to help assure a perfect throw throughout the picker's life.

- A reversible drop box picker can be no better than any one of its functional parts. Only in the Dayton Picker do you find all three parts made to the specifications above. It's easy to see why we are anxious for you to give Dayton Drop Box Pickers a trial on your looms. Why not write for full information *right now?*

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This
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of Patents
Brings You New
Economy in
Spinning and
Twisting

Cutler Tape Patents and Riverside and Dan River Patents and Patent Applications.

Cutler
*FIBER BONDED
Tape

Mill men everywhere are well aware of the superiority of Cutler Spinning Tape as an aid to economical and dependable spinning and twisting. Now comes really GOOD news in the form of Cutler Fiber Bonded Tape—a brand new product resulting from a union of Fiber Bonded yarn or roving under the Riverside and Dan River patents and patent applications AND tape weaving under the Cutler Tape Patents.

This new tape has long life, excellent strength, good spindle grip, less than 0.4% stretch in warp, saves fifteen to thirty cents a spindle annually over standard tapes AND the initial cost is at least ten per cent less than that of standard mill tapes. Production is getting under way and we invite your inquiries.

*"Reg. U. S. Pat. Offices"

CUTLER TEXTILES *is now prepared to offer to the trade the following products (two already well known to the mill men of the United States and Canada) and several new products produced under the patents mentioned above:*

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Though few can custom-blend textiles and leathers into one harmonious creation, every woman visions her next ensemble as the perfect symphony of color. And shops weary miles to give her dream reality.

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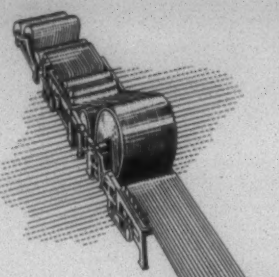
NATIONAL N DYES

Costume by Monte-San



● The first mention of cotton being used in what is now the United States is recorded in the writings of Alvar Nunez Cabeza de Vaca. As he explored the southern coastal area, he found cotton and cotton fabrics used extensively in trade and barter among the Indians of that region.

Weavers of North America..

Today—textile men prefer Staley Starches because they are sure of consistent, dependable performance from each and every shipment. Staley's complete line of unmodified and modified Textile Starches makes it possible to select the proper starch for any sizing formula. Staley Starches are under strict laboratory control during every step of the processing—from the native corn to the finished product. With over a quarter of a century of experience in serving the nation's textile mills, Staley's are qualified to help you with your sizing problems. They can recommend the correct starch for all your sizing requirements.

Number Nine in a series published as a Tribute to the Development of Weaving through the centuries

In 1528, while exploring the area that is now Louisiana and Texas, de Vaca found the Indians gathering and weaving wild cotton.

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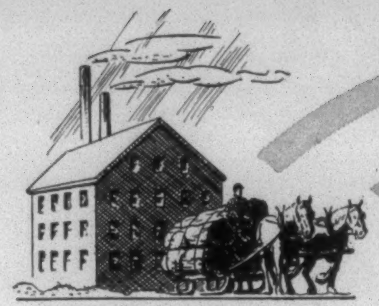
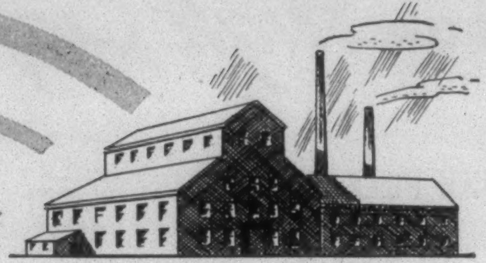
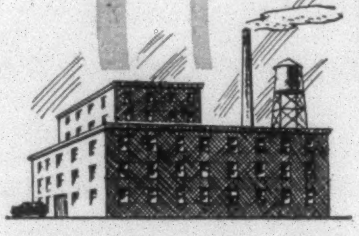


WILLOUGHBY, VT.
in the Northern hardwood stands
LOGGING AND ROUGH STOCK



LAWRENCE, MASS.
in the New England textile area
SHUTTLES, BOBBINS, SPOOLS



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AUTOMATIC LOOM AND WARP BOBBINS

What we mean by *all-'round* production facilities

The U S sales engineer who calls on you is backed up by not *one*, but *four* production centers strategically located to serve any mill anywhere in the "textile territory", North or South.

That means ample plant capacity to handle any size orders, to give them the attention of qualified specialists. It also means complete production within the U S organization – *complete* control of every step of the manufacturing process from forest to your frames, from logging to your looms.

Tell a U S representative your requirements, and he'll match this unequalled manufacturing capacity to your needs – ordinary or extraordinary – for equipment that will lower costs and improve quality, whether you need Bobbins, Shuttles, Cones, Rolls, Spools, or Skewers.

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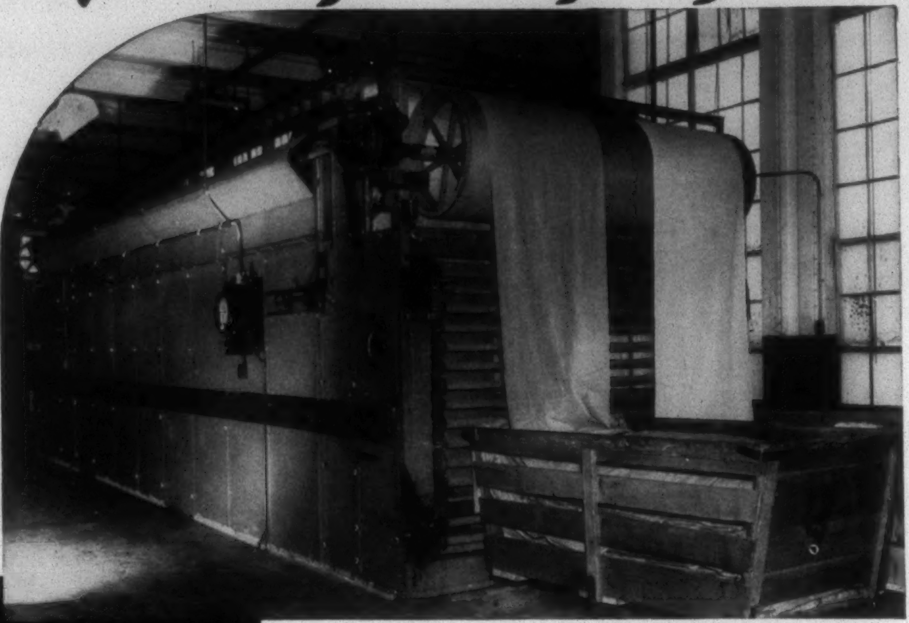
FOR *High Capacity Drying* OF

SILK PIECE GOODS

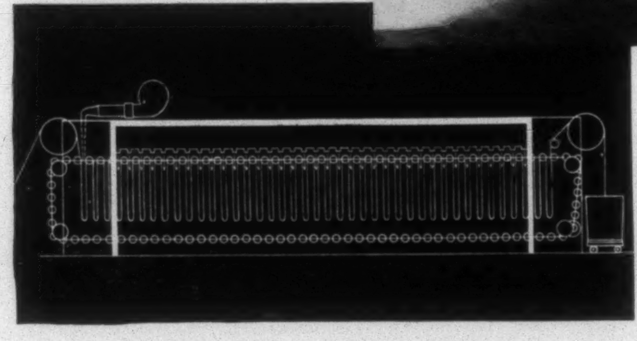
SPUN RAYONS

FINISHED PIECE GOODS

TOWELING

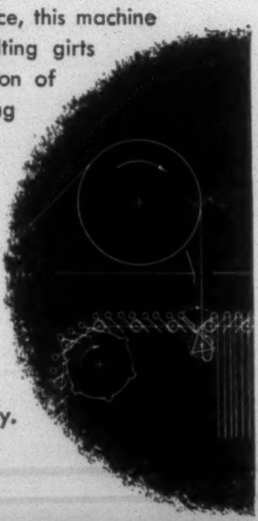


Cross section below illustrates location of nozzles, air circulation, travel of goods through the machine, and clearly shows the positive action of the looping device. Machine may be equipped with automatic folding device or rolling up attachment, depending upon individual requirements.

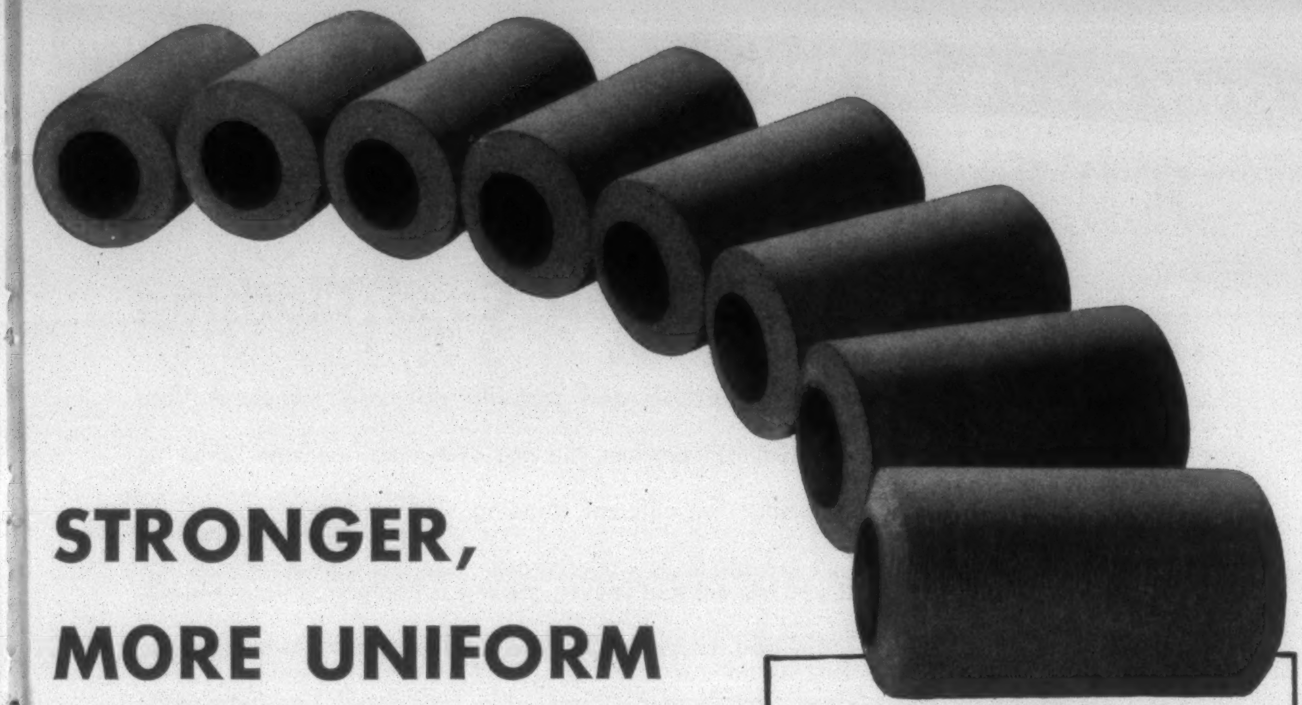


PROCTOR
LOOP DRYER

To meet the demand for maintaining high quality in the drying of piece goods—and at the same time obtain large scale production, many mill men have found the Proctor Loop Dryer to be in a class alone. When this dryer is employed for the drying of *finished* piece goods, such as the spun rayons, it is possible to accurately control the amount of air being directed down into each loop of goods, by means of adjustable baffles. An exterior adjustment makes it possible to exercise this control so that the operator may determine the exact amount of air circulation taking place inside the machine. Such control of air circulation assures perfectly smooth loops and prevents swirling and creasing, which may cause marks in the finished goods. Obviously, in the handling of certain classes of goods, such as toweling, the adjustable baffles are not a necessary refinement. Then, too, the girts, by which the goods are carried through the dryer, revolve intermittently so that no part of the material being dried is in contact with any part of the machine for any appreciable time. This prevents the finished piece goods being marred by stick marks. In order to achieve high capacities in a minimum floor space, this machine is often designed with special tilting girts (illustrated at right). The operation of these tilting girts permits reducing centers between girts and makes possible increased loading of the machine. The girts are tripped to an open position at the time of looping, thereby permitting free loading. If you are engaged in the drying of piece goods, it would be to your distinct advantage to learn the details of this machine. Write today.

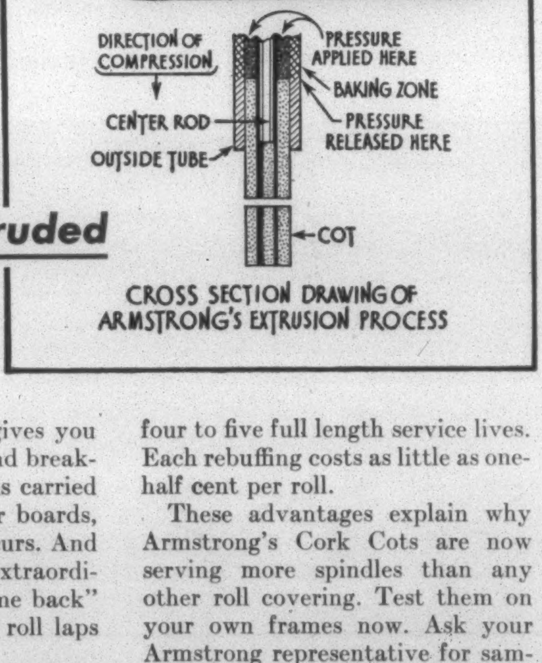


PROCTOR & SCHWARTZ • INC • P&S PHILADELPHIA 20 • PA.



STRONGER, MORE UNIFORM YARN

. . . because this cork cot is extruded



CROSS SECTION DRAWING OF ARMSTRONG'S EXTRUSION PROCESS

DEVELOPED in Armstrong's Laboratories, the exclusive extrusion process shown above produces seamless cork cots. These seamless cots are uniform in density from inside to outside, from end to end . . . and from cot to cot! Consequently, they compress evenly, maintain a true drafting surface, spin stronger, more uniform yarn.

This seamless construction, plus their consistently high friction, accounts for the year-in, year-out superior performance of these cork cots. Their extra "grip" gives you better drafting, reduced end breakage, less slippage. Waste is carried well back onto the clearer boards, so that no eyebrowing occurs. And because these cots are extraordinarily resilient, they "come back" quickly after passing top roll laps or hard ends.

In addition, Armstrong's Cork Cots are low in first cost. They have a long initial service life. And they can be rebuffed, made like new, three or four times . . . for a total of four to five full length service lives. Each rebuffing costs as little as one-half cent per roll.

These advantages explain why Armstrong's Cork Cots are now serving more spindles than any other roll covering. Test them on your own frames now. Ask your Armstrong representative for samples, prices, and complete information. Or write today to Armstrong Cork Company, Textile Products Dept., 8206 Arch Street, Lancaster, Pennsylvania.

BETTER RUNNING WORK

— MORE POUNDAGE

ARMSTRONG'S CORK COTS

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Every Department Benefits when Carding is Uniform

Reclothe your Cards with

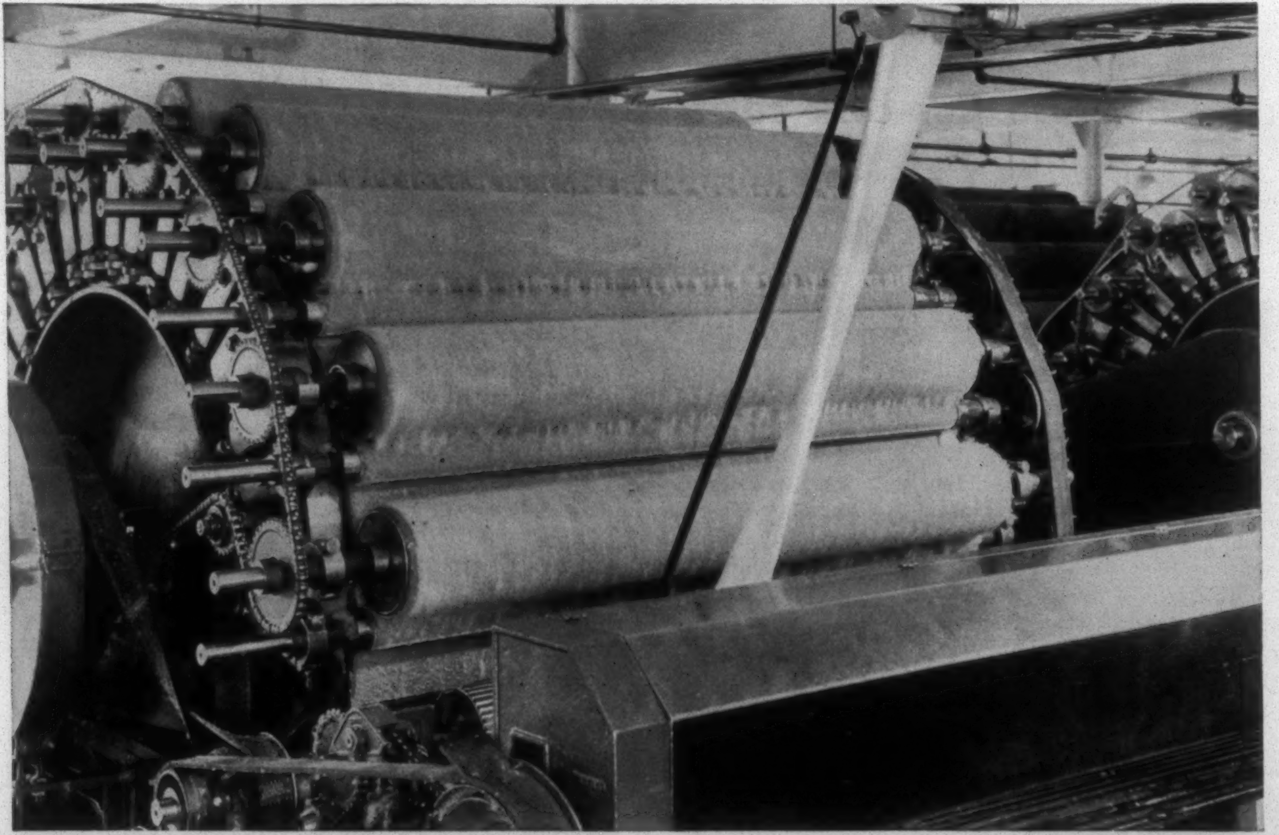
TUFFERIZED Card Clothing

TUFFER PRODUCTS

Card Clothing for Woolen, Worsted, Cotton, Asbestos and Silk Cards • Napper Clothing, Brush Clothing, Strickles, Emery Fillets. Top Flats Recovered and extra sets loaned at all Plants. Lickerins and Garnet Cylinders from 4 to 30 inches and Metallic Card Breasts Rewired at Southern Plant • Midgley Patented, and Howard's Special Hand Stripping Cards • Inserted Eye & Regular Wire Heddles

Expertly applied and properly operated Tufferized Card Clothing will produce the fine even web free from "nibs" so necessary for efficient spinning and weaving.

If you suspect that uneven carding is hampering your spinning room and weave room have a Howard representative inspect your card clothing. He will detect and report the cause and make suitable recommendations.



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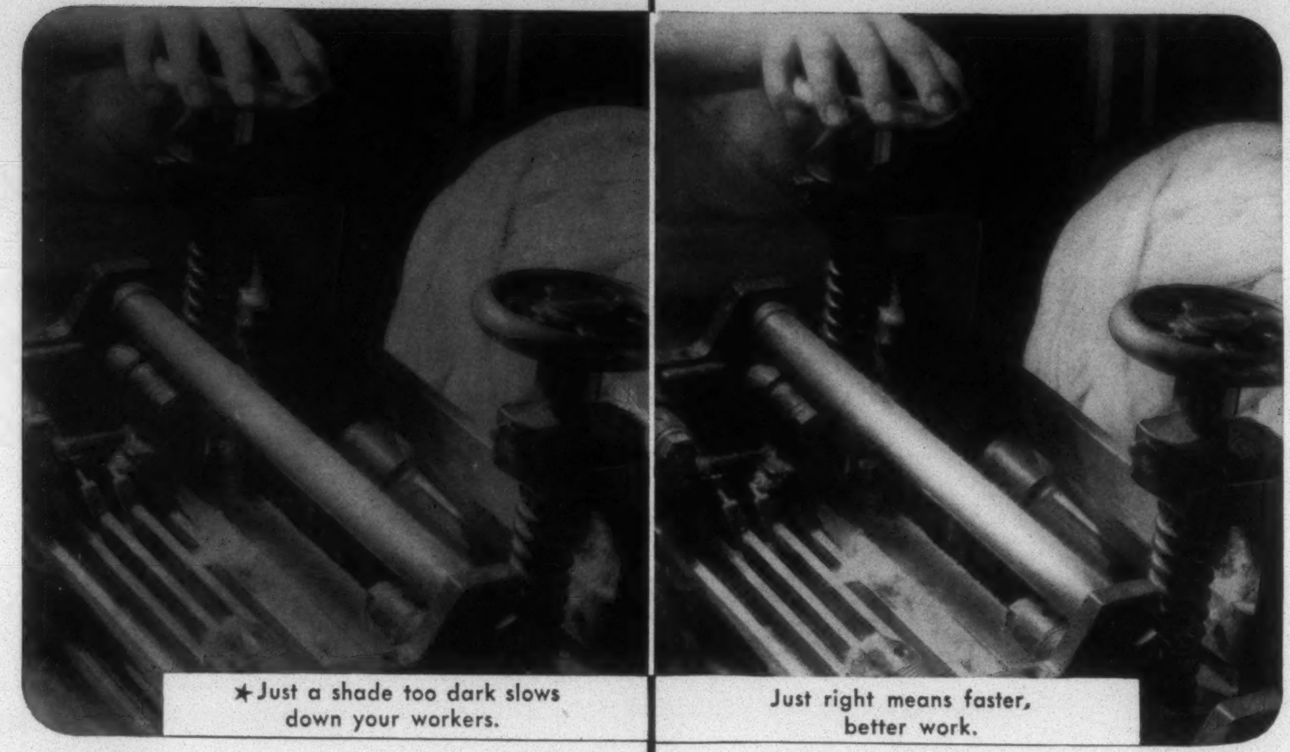

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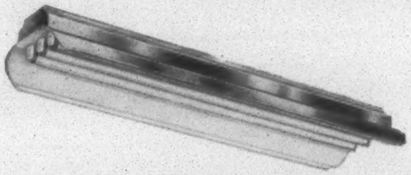

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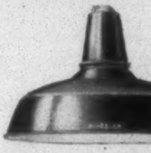

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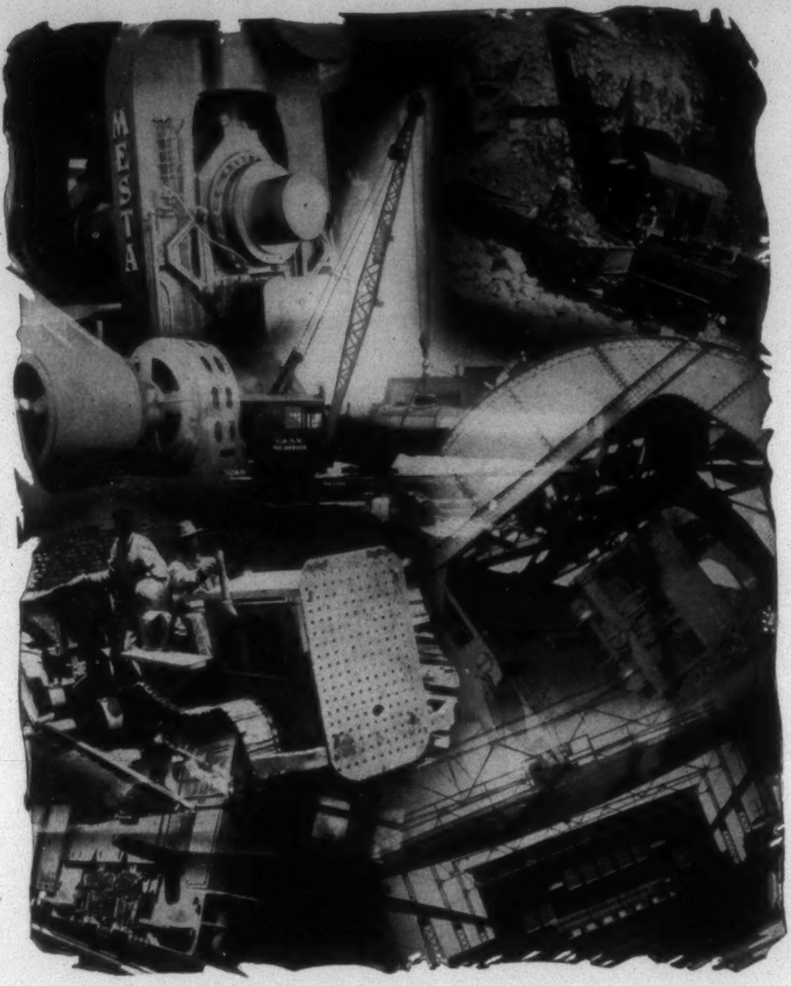

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"**Not a bearing overheated . . .**
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ANOTHER DAN RIVER RESEARCH PROCESS

PROCESS OF TREATING TEXTILE MATERIALS

United States Patent No. 2,334,199
Issued to Harley Y. Jennings, Nov. 16, 1943
(Also Known as Resin-Pigment Dyeing Process)

This is an improvement on the Bartell Patent, No. 2,097,012, both processes being controlled by Riverside & Dan River Cotton Mills, Inc., Danville, Virginia.

THE INVENTION AND ITS OBJECT

For the information of the textile industry, and particularly for the information of those units of the industry engaged in the coloring and dyeing of textile materials, we quote, in part, from the patent papers, as follows:

"This invention relates to processes of treating textile materials and particularly to the art of coloring textile fibers and objects made from such fibers.

"The invention contemplates the fixing or setting of a dyestuff on a fabric or textile material by means of a water-insoluble resinous substance which substance is dissolved in a suitable solvent. The dyestuff used may likewise be soluble in the solvent for the resin or it may comprise an insoluble pigment, but in any event it should be water-insoluble.

"In order to insure a maximum degree of penetration and to use a minimum amount of solvent, the invention contemplates the formation of an oil-in-water emulsion in which a solvent containing dissolved resin and coloring matter constitutes the inside or disperse phase. In order to form an emulsion of this type, the solvent used should be insoluble in water.

"A sufficient quantity of water is used to make the emulsion relatively thin, so that the fabric or other material to be dyed may be passed through a padding bath comprising the oil-in-water emulsion. In passing through the bath the fabric, because it is more readily wet by the organic solvent than by the water, is penetrated by the solvent droplets containing the dissolved resinous substance and coloring matter and is then dried, leaving a film of coloring matter and resinous substance around the individual fibers which comprise the textile material. The resinous substance serves not only to bind the coloring matter to the fibers in a smooth substantially continuous film, but also serves as a finish for the treated material, so that I accomplish the usual dyeing and finishing steps in a single operation with a resultant saving in time and labor.

"By a judicious selection of resins the finish so applied may be permanent as regards washing and dry cleaning with the usual solvents, and may also impart added wear to the fabric, by offering an additional surface against abrasive wear.

"As both the resinous substances and the coloring matter are water-insoluble, the treated material may be subjected to repeated washings without affecting the 'hand' or appearance of the material. The coloring matter, bound to the material by or as a part of the dry film of resinous substances, is fast and permanent."

Claims Nos. 2, 3 and 4 are quoted by way of example, of the six claims of this patent, as follows:

2. "A solid-colored textile material comprising a fabric having discrete fibers, and means substantially covering the discrete fibers to color the same, said means comprising a thin substantially continuous film of resinous substance containing coloring matter, the material being, to the naked eye, of a uniform color and appearance, substantially identical with the product of claim 4.

3. "The art of treating textile materials having discrete fibers which comprises dissolving a water-insoluble resinous substance and an oil-soluble dye in a volatile organic solvent, incorporating in such solution water to produce a relatively fine oil-in-water type emulsion in which the tiny droplets of organic solvent containing dissolved resinous substances and dye comprise the disperse phase, the consistency of the solution being such that the liquid will enter the capillary spaces of the textile material, subjecting the material to said emulsion whereby the droplets of organic solvent containing dissolved resinous substance and dye are absorbed by the textile material due to the high affinity of the organic solvent for the textile material, and then evaporating the organic solvent to leave the resinous substance and dye as a thin film on the discrete fibers of the textile material.

4. "The art of treating porous textile materials having discrete fibers comprising as a step, applying to discrete fibers of the structural yarns of the fabrics an aqueous dispersion of water-insoluble resin, water-insoluble coloring matter and water-insoluble organic solvent for the resin, the consistency of the dispersion being so thin as to leave said interstices open, the organic solvent being of a nature as to carry the dispersed resins and coloring matter into the capillary spaces of the material, and drying the material to leave a thin coating of resin and coloring matter around the discrete fibers without materially affecting the porosity of the material."

STATUS OF THE INVENTION DURING THE WAR PERIOD

Under the contract entered into by Riverside & Dan River Cotton Mills, Inc., with the United States Government during the period of the late war, the patent herein referred to was specifically designated by its number (2,334,199) as being among those to which Riverside & Dan River Cotton Mills, Inc., granted "releases and royalty-free licenses to the Government to practice the inventions secured by their patents and applications for patents."

Hence, during the period of the war, the assignee of this patent, Riverside & Dan River Cotton Mills, Inc., gave no public notice of its exclusive rights to this process.

By its terms this contract with the Government terminated "on the date six months after the cessation of hostilities in all wars in which the United States is now engaged." Accordingly, this contract with the Government expired as of March 2, 1946.

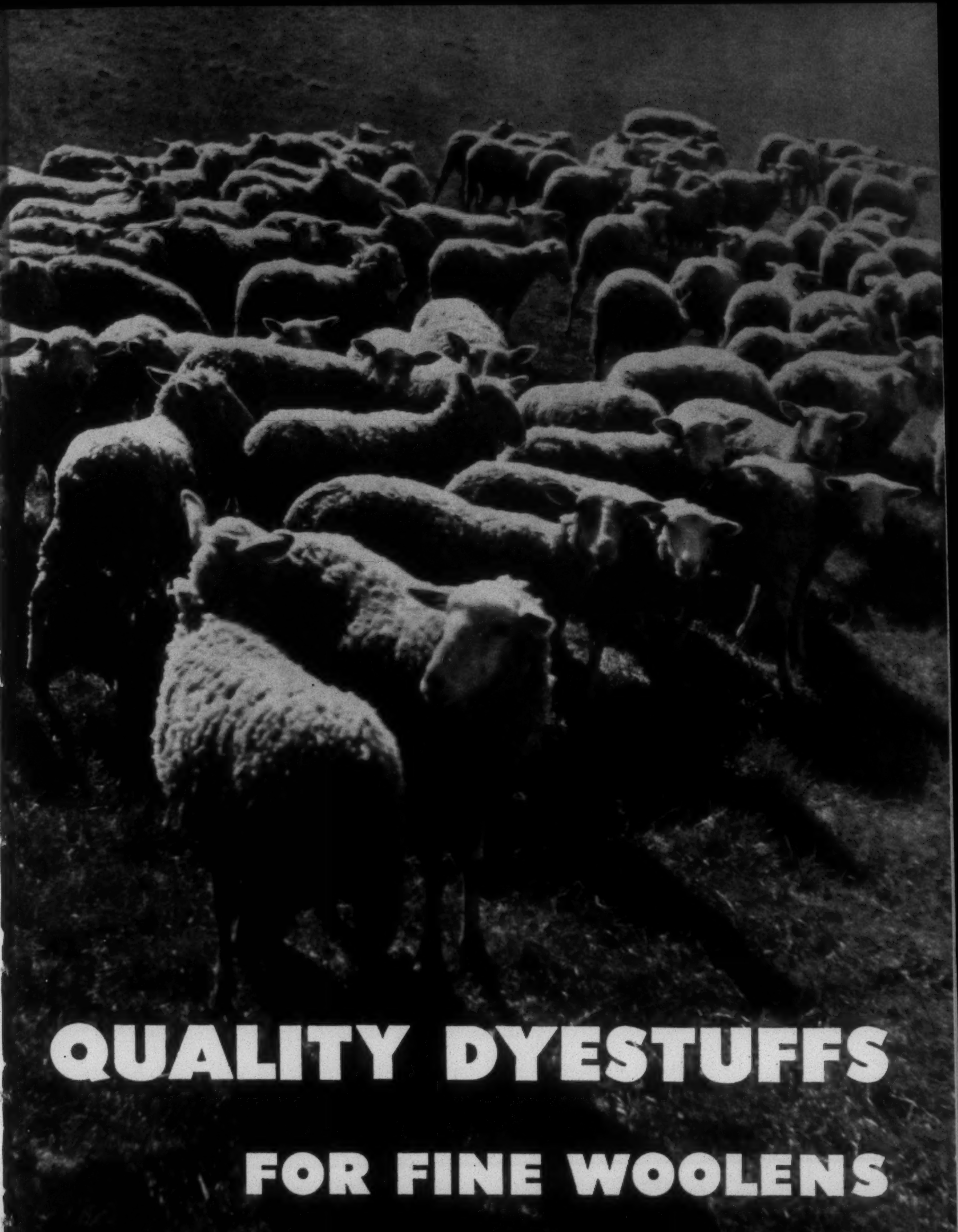
LICENSING AGREEMENTS

Upon expiration of this contract, Riverside & Dan River Cotton Mills, Inc., proceeded forthwith to make available to the industry Licensing Agreements under the terms of which Licensees will be enabled to enjoy all the benefits of this invention equally with Riverside & Dan River Cotton Mills, Inc.

Information as to these licensing agreements
may be obtained from

Research Engineering Division

RIVERSIDE & DAN RIVER
COTTON MILLS, INC.
DANVILLE, VIRGINIA



Photograph courtesy of F. Ducharne Silk Co.

8 DISTINCT ADVANTAGES in Condor Whipcord V-BELTS

1. Wide margin of strength
2. Minimum inelastic stretch
3. Uniform flexibility
4. Maximum resistance to structural breakdown
5. Smooth running
6. Maximum traction
7. High resistance to side wear
8. Correct lateral reinforcement

The outstanding difference in Condor V-Belt construction is the Whipcord *Strength Member* illustrated in the above cross section. This backbone of draw-power is composed of strong strands of cotton cord made to Manhattan's own specifications, impregnated and encased in strong, tenacious, slow aging *Flexlastics* . . . Other factors being equal, the useful life of a V-Belt is limited by excessive stretch. The function of the Condor Whipcord *Strength Member* section is to take the load and prevent undue stretch.

V-Belt Bulletin #6868B (mailed on request) gives more details of the long-wearing construction and includes helpful tables.

Available also in Paranite G.O.P. (Gas Oil-Proof) and Non-Spark compounds of Flexlastics.

The term FLEXLASTICS is an exclusive MANHATTAN trade mark. Only MANHATTAN may make FLEXLASTICS. MANHATTAN Belts will be made in the red color when again possible.

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WHAT USERS SAY ABOUT AMCO

SUPERINTENDENT OF LARGE COTTON MILL EXPECTS 10% INCREASE IN WEAVE-ROOM EFFICIENCY FROM NEW HUMIDIFYING SYSTEM

"We have just contracted for a humidifying system for the weave room. This system will guarantee us a relative humidity of 80% with a 10% variation in temperature.

"At present, we have nothing to make working conditions in this room more pleasant, and the heat in this room is unbearable. We are certain that by installing this new humidifying system we may expect a better morale to result. From this better working condition we expect to get a 10% rise in efficiency.

"We considered installing air conditioning in the weave room instead of this humidifying system. But this air conditioning involved (1) too much money, (2) considerable duct work overhead, and (3) the problem of dust and lint eventually getting into the screens, which would necessitate frequent cleanings.

"Whereas with the humidifying system, we don't have any ducts. We are putting in 19 ventilating fans; each one is automatically controlled."

HUMIDIFYING EQUIPMENT PAYS FOR ITSELF MANY TIMES OVER IN THIS WORSTED MILL

"We were not aware of short selling ourselves on top until we discovered by accident a couple of years ago that our combed wool was far under regulation of standard moisture content," says the vice president. "Ours was running dry. We installed humidifying equipment, and now our average moisture content is 11%. This equipment has paid for itself many times."

★

THESE two clippings refer to the results of Amco Humidification Systems such as that shown below whereby a prominent worsted manufacturer reaped the benefits of Amco humidification *in every major department of his mill!*

An Amco System automatically holds humidity right on the mark . . . cuts breakage of warp and filling . . . reduces imperfect goods . . . keeps production at peak capacity. Self-cleaning Amco Atomizers deliver finely atomized spray without drip or feathering down – the self-cleaning feature in both air and water nozzles reduces maintenance to a minimum.

Right now – find out how Amco can speed up production and cut costs. Let an Amco engineer survey your plant and submit recommendations for the exact system to meet the particular conditions and needs of your mill.

EVERY DEPARTMENT OF THIS WORSTED MILL IS BENEFITING FROM AMCO HUMIDIFICATION

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Small wonder, therefore, that the record for uniformly high quality and quantity of Onyxsan* used makes it the outstanding cationic finish in the textile field.

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Du Pont Dyestuffs

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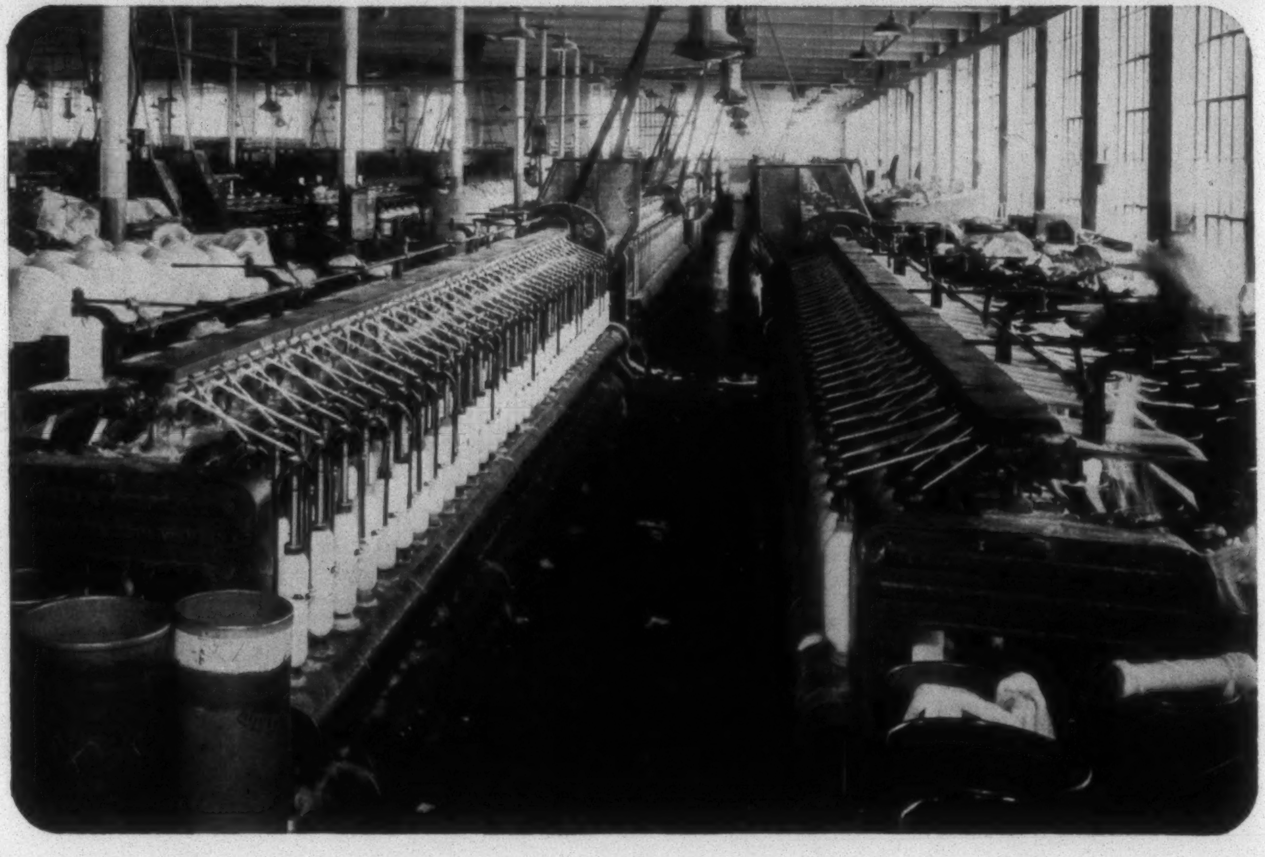
AVOID UNEVEN DRAFT with SINCLAIR NO-DRIP LUBRICANTS



IF **UNEVEN** draft and high yarn breakage are problems that seem to defy solution, look into your lubrication.

Faulty lubrication can produce these unwanted results. Besides being creep and drip-proof, a *correct* lubricant must flow evenly through the saddle bore or wick, must be made to minimize roll neck friction.

Sinclair NO-DRIP LUBRICANTS give you the correct combination of qualities. They're made in 5 grades—all smooth flowing, non-dripping, non-creeping. For clean, efficient top roll lubrication try Sinclair NO-DRIP LUBRICANTS.

SINCLAIR TEXTILE LUBRICANTS

FOR FULL INFORMATION OR LUBRICATION COUNSEL WRITE SINCLAIR REFINING COMPANY, 630 FIFTH AVENUE, NEW YORK 20, N. Y.

textile bulletin

Vol. 70 June 15, 1946 No. 8

Southern Textile Association Holds 37th Annual Convention at Myrtle Beach, S. C.

AT their first full-scale convention since 1941, held June 6-8 in the Ocean Forest Hotel, Myrtle Beach, S. C., members of the Southern Textile Association named John M. Caughman, general superintendent of Spartan Mills at Spartanburg, S. C., as president to succeed B. M. Bowen, superintendent of Salisbury (N. C.) Cotton Mill. Virgil E. McDowell, assistant superintendent of Rosemary Mfg. Co. at Roanoke Rapids, N. C., was elevated from his position of chairman to the vice-presidency vacated by Mr. Caughman. R. T. Stutts, superintendent of Easley Cotton Mills at Liberty, S. C., was named chairman of the board, and Marshall Dilling of Gastonia, N. C., was re-elected executive secretary. Two members of the association's board of governors—Smith Crow, superintendent of Erlanger Mills, Inc., at Lexington, N. C., and J. L. James, assistant manager of Erwin Cotton Mills Co. at Cooleemee, N. C.—were chosen to serve second three-year terms. Elected to the board for the first time were J. B. Templeton, superintendent of the Brandon Corp. Poinsett Mill at Greenville, S. C., and Thomas King, master mechanic for Springs Cotton Mills at Lancaster, S. C. Their terms will expire in 1949.

The convention got under way Thursday night, June 6, with a banquet arranged by the S. T. A. Associate Members Division and held in the hotel dining room. Division Chairman John C. Turner, sales agent of Atlanta, Ga., presided and asked for the report from the nominating committee made up of Emmet Steger (chairman), Sherwin-Williams Co., Charlotte, Clyde Lassiter, Penick & Ford, Ltd., Greensboro, N. C., and John M. Reed, Ashworth Bros., Charlotte. The report was approved unanimously, resulting in election of the following Associate Members Division officers: chairman—Falls L. Thomason, New York & New Jersey Lubricant Co., Charlotte; first vice-chairman—Claude Iler, Keever Starch Co., Greenville, S. C.; second vice-chairman—Dallas Neese, Odell Mill Supply Co., Greensboro; and secretary—Junius M. Smith, Clark Publishing Co., Charlotte. Mr. Turner then accepted the silver cup presented by TEXTILE BULLETIN to each retiring chairman of the Associate Members Division.

Following the Associate Members Division banquet, and again Friday night, entertainment by a show troupe from Atlanta was presented in the hotel ballroom. The following firms and individuals contributed to the fund raised by the Associate Members Division to provide entertainment and prizes during the convention: Abbott Machine Co., Aldrich Machine Works, American Moistening Co., American Viscose Co., *American Wool & Cotton Reporter,* Armstrong Cork Co., Arnold, Hoffman & Co., Ashworth Bros., Inc., Atlanta Belting Co., Atwood Machine Co., Barber-Colman Co., Barkley Machine Works, Blackman-Uhler Co., Inc., Bryant Electric Repair Co., A. B. Carter Co., Ciba Co., Clinton Co., Cocker Machine & Foundry Co., Corn Products Sales Co., *Cotton,* Cox Foundry & Machine Co., Curtis & Marble Machine Co., Dary Ring Traveler Co., Draper Corp., Duke Power Co., E. I. du Pont de Nemours & Co., Inc., Emmons Loom Harness Co., Foster Machine Co., Foxboro Co., Gossett Machine Co., Greenville Belting Co., Gulf Oil Corp., H & B American Machine Co., Hart Products Co., Hollister-Moreland Co., Ideal Machine Shops, Keever Starch Co., Ralph E. Loper Co., Manhattan Rubber Mfg. Div. of Raybestos-Manhattan, Inc., McKelvie Machine Co., McLeod Leather & Belting Co., Byrd Miller,

SOUTHERN TEXTILE ASSOCIATION OFFICERS – 1946-47

John M. Caughman
President

V. E. McDowell
Vice-President

Robert T. Stutts
Board Chairman

Marshall Dilling
Executive Secretary

Montgomery & Crawford, Inc., Moreland Chemical Co., Mountain City Foundry & Machine Co., National Ring Traveler Co., New York & New Jersey Lubricant Co., Olney Paint Co., Penick & Ford, Ltd., Inc., Belton C. Plowden, Ragan Ring Co., J. E. Rhoads & Sons, R. R. Rowland, Saco-Lowell Shops, Seydel-Woolley & Co., Sherwin-Williams Co., J. E. Sirrine & Co., Slip-Not Belting Corp., Sonoco Products Co., Staley Sales Corp., Southern Standard Mill Supply Co., Steel Heddle Mfg. Co., Stein, Hall & Co., Stodghill Co., Jos. Sykes Bros., Taylor Instrument Cos., TEXTILE BULLETIN, *Textile World,* John C. Turner, Universal Winding Co., Veeder-Root, Inc., Victor Ring Traveler Co., WAK Industries, Walker Mfg. Co., Watson & Desmond, Westinghouse Electric Co., Troy Whitehead Machinery Co., Whitin Machine Works and Whitinsville Spinning Ring Co.

The first business session was opened by President Bowen, who delivered a brief address relative to the association's functions. His remarks were followed by those of J. Norman Pease, president of J. N. Pease & Co. at Charlotte, and Dr. Harley Y. Jennings, assistant director of research for Riverside & Dan River Cotton Mills, Inc., at Danville, Va. At the conclusion of these addresses, all of which are published on following pages, Mr. Bowen appointed the following committee to nominate new officers: A. R. Marley, Erwin Cotton Mills Co., Durham, N. C., chairman; J. E. McGee, Rosemary Mfg. Co., Roanoke Rapids, N. C.; and J. A. McFalls, Beaunit Mills, Inc., Rockingham, N. C.

Winners of prizes in the golf, bridge and setback tournaments which were staged Friday afternoon were announced at the banquet that night by Joe C. Cobb, former S. T. A. president. Low gross golf score in the mill men's division was carded by Gordon Cobb of Charlotte, another past president. Second low gross was made by W. W. Griffin of Southern Franklin Process Co., Greenville, S. C.; Harry Shealy of Pacific Mills, Columbia, S. C., won low net and G. B. Sessions of Ware Shoals (S. C.) Mfg. Co. scored second low net. G. H. Dunlap of the North Carolina State College school of textiles won the consolation prize. Among associate members, Q. G. McCombs of Sandoz Chemical Works won low gross, followed by W. G. Terrell of the Terrell Co., Inc., Charlotte. A. E. Johnson of Ashworth Bros., Greenville, carded low net ahead of E. T. Hughes of Gulf Oil Co. R. W. Bailey of Veeder-Root, Inc., Greenville, won consolation.

First prize in bridge was won by Mrs. James Taylor, and second by Mrs. G. B. Sessions. Winning teams in setback were made up of Associate Members Roy Burkhalter and John Hooten, and B. M. Bowen and Frank Osteen, mill men.

The Associate Members Division, in addition to furnishing prizes for golf, bridge and setback, presented more than 30 gifts to ladies who were present for the Friday night banquet. Another feature of the occasion was recognition of the more than 30 years' service to the association by Executive Secretary Marshall Dilling. An engraved silver bowl was presented to him, on behalf of the S. T. A. membership, by W. G. Ashmore of McGraw-Hill Publishing Co.

The final business session Friday morning featured addresses by Dr. Frederick T. Peirce, director of research for the North Carolina State College school of textiles, and Harry F. Schoenfelder, experimental engineer for the Army Quartermaster Corps inspection service. Their remarks are published in this issue. Following the nominating committee's report and subsequent elections, Southern Textile Association officials for 1946-47 were introduced. The convention closed with presentation of the S. T. A. Past Presidents' Medal to Mr. Bowen.

—SCENES FROM S.T.A. CONVENTION BANQUETS—

Left to right, top to bottom: seated at main table Thursday night, John Caughman, George Snow, Virgil McDowell, B. M. Bowen and E. H. Steger; the accordionist sings and plays for the special benefit of Falls Thomason, Marshall Dilling, David Clark and John Fonville; Mrs. W. A. Kennedy, Dillard Ragan and Mr. Kennedy; Retiring Chairman John Turner and Past Chairman Bill Randolph of the Associate Members Division harmonize with accordion accompaniment; Mr. and Mrs. Robert Dixon and party at the Thursday night banquet.

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Report of the Retiring President

By B. M. BOWEN

LAST December you conferred upon me the highest honor you could confer on any man. I do not feel that I have merited it, but certainly appreciate it. Whatever has been accomplished by the association has been done by you gentlemen who have so courageously given us your support. We have not done all we hoped to accomplish. We ask that you do all you can to help make the association more successful next year.

During the spring we have had divisional meetings, with a good average attendance at each meeting. We are glad of the interest shown, and it is hoped that as the fall meetings are held that a higher average will be noted. It is our opinion that these divisional meetings are where we gather the knowledge for our efforts. We exchange ideas. We need not think that we are going for pastime or pleasure. Men meet together from different localities and mills and discuss ways of manufacturing varied products. To me it seems that these meetings are the place from which we received dividends and the mills should derive benefits in renewed efforts and a determination to be better men. It is open to all classes of men from those who aspire to be foremen to those who have reached the higher positions. You are urged to take advantage of the opportunity and participate in their deliberations.

It has been five years since we have had the privilege of meeting here at Myrtle Beach. The textile industry has done great things during the war. The Southern Textile Association and the operatives of the mills we represent are proud that the job has been well done. The last five years have brought about a great many changes and we are aware of these. There probably will be many more. We all know that there is a market for all that can be made at this time. It is our opinion that now is the time to take stock and prepare for greater changes and achievements. Perhaps some of us know that certain things need to be done in our plants in order to be ready for the future.

Some of us may have suffered for repair parts, or we may have been forced to use ill-fitting parts. It is a good time to begin to set our house in order. Some of us may have to go into greater diversity of manufacturing. If that time should come then the man who has his plant in good shape will be ahead in the game, or will at least have more time for other duties.

Let us remember that the mechanical facilities of our plants should be kept in the very highest operating condition possible. Constant examinations should be made of all machinery from the opening room to the finished product. It is apparent that because of the high price of cotton we are entering into an era in manufacturing that better opened and cleaned cotton will become mandatory. Careful study should be given the kind of cleaning equipment. Check the condition of the stock after it has been cleaned and ascertain if we are able to produce more and better production from subsequent machines. We will not attempt to summarize the many things that may need our attention. Let us strive to be ready to meet whatever opportunity that may present itself. Perfection may not be attained, but we should exert every effort to reach this high mark.

We thank you gentlemen for your presence. We hope your trip here will be profitable and recreational. We will appreciate your presence and help at all the meetings. I thank you.

Trends in Textile Mill Construction

By J. NORMAN PEASE

IN speaking of the trend of mill construction, it is advisable to review types of construction which have been introduced into textile mills for the last 40 years. I remember back in 1915 when we were always using "standard mill construction," consisting of brick walls and wooden floors and wooden columns. Mills were generally 75 feet wide, three-bay construction on approximately nine-foot centers. At that time we had not approached the air conditioning era, nor had we to any extent stressed illumination. I remember a two-story addition for a textile plant in Georgia which cost 82 cents per square foot for the building construction. It hardly seems possible compared to today's prices. This price existed prior to World War I. The average cost of complete mill construction was approximately $1.25 per square foot. This included lighting, heating and sprinklers.

After World War I, we began to develop concrete and steel frames and wooden floors, but not getting away to any extent from the original mill type construction. About 1925, one company built a much advertised windowless manufacturing plant. This was a sensation at the time.

From 1920 to 1938, textile plants were undergoing a gradual change in type. Steel and concrete were more generally used and efforts were being made to make working conditions not only more comfortable, but more constant as to humidity and temperature. Today certain manufacturing

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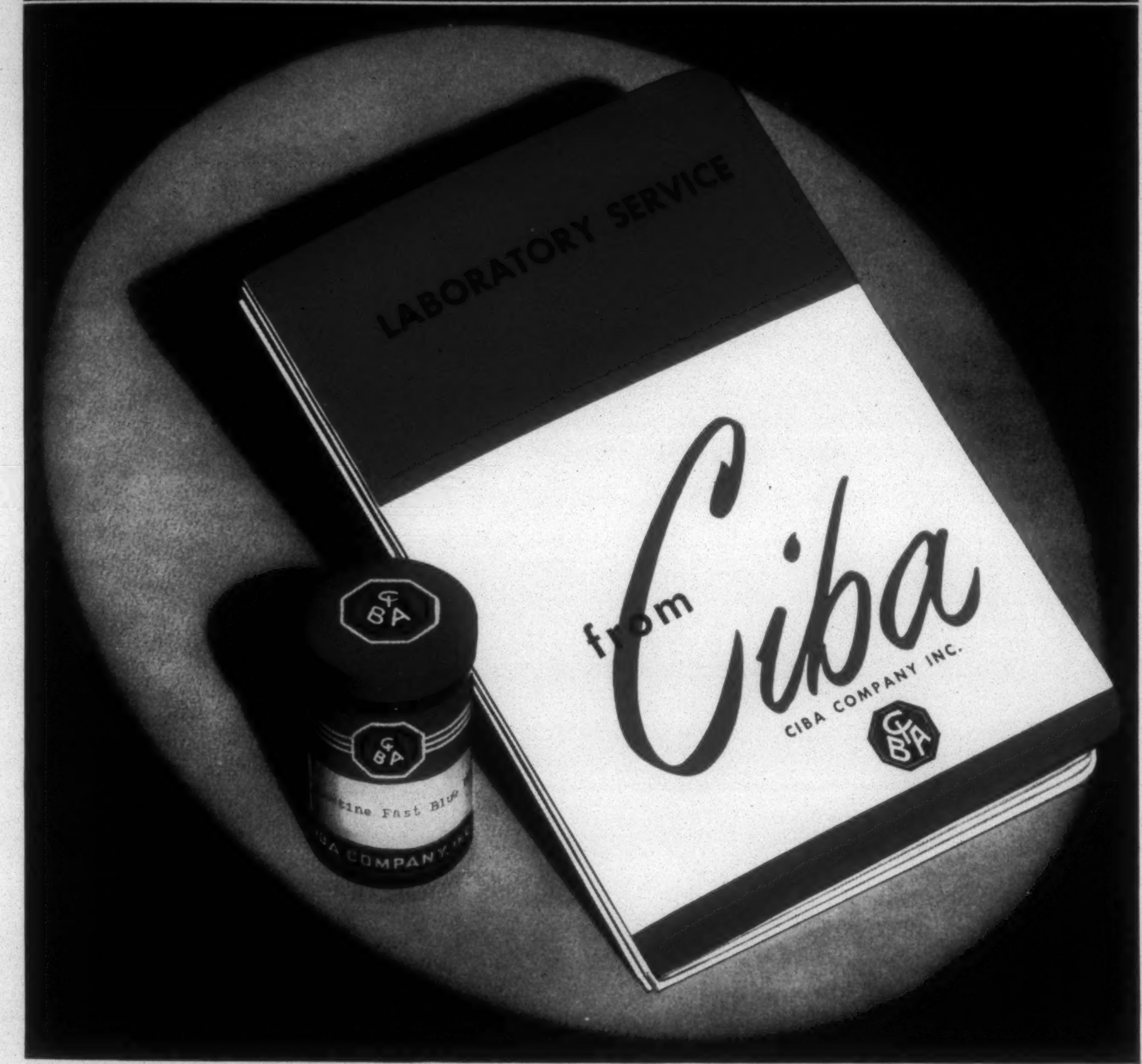

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processes dictate better type construction, including the latest equipment, lighting and air conditioning. To what extent air conditioning will be generally adopted in cotton mills remains to be seen, but it is known that textile plants are today being built equipped with the latest machinery for air conditioning, humidifying and heating, in order that operating conditions may be kept constant.

In the early days of mill construction, lighting was entirely inadequate. It was not uncommon to see an average of five to 7½ foot-candles of ilumination. Today with modern lighting and the use of fluorescent tubes, we are getting high intensity and generally illumination often as much as 40 to 60 foot-candles. Studies are constantly being made in the proper type and proper use of insulating material.

Currently, a condition exists which I have never seen before, in that it is less expensive to build from concrete and steel than it is to build from wood and brick. As to costs of construction, I would like to cite some comparisons. Prior to World War I, the average cost of mill construction was $1.25 per square foot. After World War I, and continuing until 1940, there was little variation in construction prices, and mill type buildings were constructed from $2 to $2.50 per square foot, or an average price of $2.25. Within the last year this same type of construction has cost $4.50 per square foot.

I look for no immediate relief from the high cost of construction. I expect that the construction industry will continue at a high speed for the next five years. I do anticipate that during this time there will be some slight reduction in costs, due to the fact that material and labor will become more plentiful, thereby requiring a shorter time to complete work. A general flattening out of construction costs will not come, however, until the big backlog of industrial construction has been taken care of satisfactorily.

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The Fiber Bonded Process for Yarns

By DR. HARLEY Y. JENNINGS

ON the wall of the General Motors Research Laboratory in Dayton hangs this motto—"This problem when solved will be simple." We do not wish to infer from this statement that the Fiber Bonded process has been solved in its entirety, but the development has advanced to the point where we appreciate that it has a very definite place in the textile field, and particularly in the field of industrial yarns and fabrics. The development is simple in that it is based on a simple principle; however, the application of this principle in a commercial manner has called for a great deal of mechanical ingenuity and chemical development.

This development cannot be presented without referring to twist and its related properties. It is a fundamental principle in all textile yarns and cords that the tensile strength is directly related to the twist. Sliver or roving without twist has practically no tensile strength and it is only as twist is applied with the corresponding increase of the coefficient of friction between the fibers that tensile strength is developed. The tensile strength is increased as the twist is increased up to a certain point. Eventually, a point is reached that as the twist is increased the sheering action of the fibers upon each other becomes so great that the tensile strength decreases with increased twist. A great many research laboratories and research groups of all types have spent thousands of hours and volumes of reports have been made relating twist to length of fiber and construction of yarn or cord. All of these reports emphasize the fact that there is an optimum twist which gives the greatest tensile strength.

However, it is readily observed that if we break a yarn or cord which has the optimum twist for producing the greatest tensile strength, in general, comparatively few fibers are ruptured—the most of them slip at the point of rupture. It becomes evident then that if a bonding material is added to the yarn which has this optimum twist so that many of these fibers are bonded together and are forced to rupture under tensile stress rather than slip, the tensile strength of that yarn will be greatly increased. This is the first basic principle of the Fiber Bonded process. Added to this is the fact that if at the time of setting of these bonding materials the yarns and cords are so tensioned that the greatest possible alignment of both fibers and strands is produced, so that the stress is fairly and equally maintained, then the tensile strength is again greatly increased.

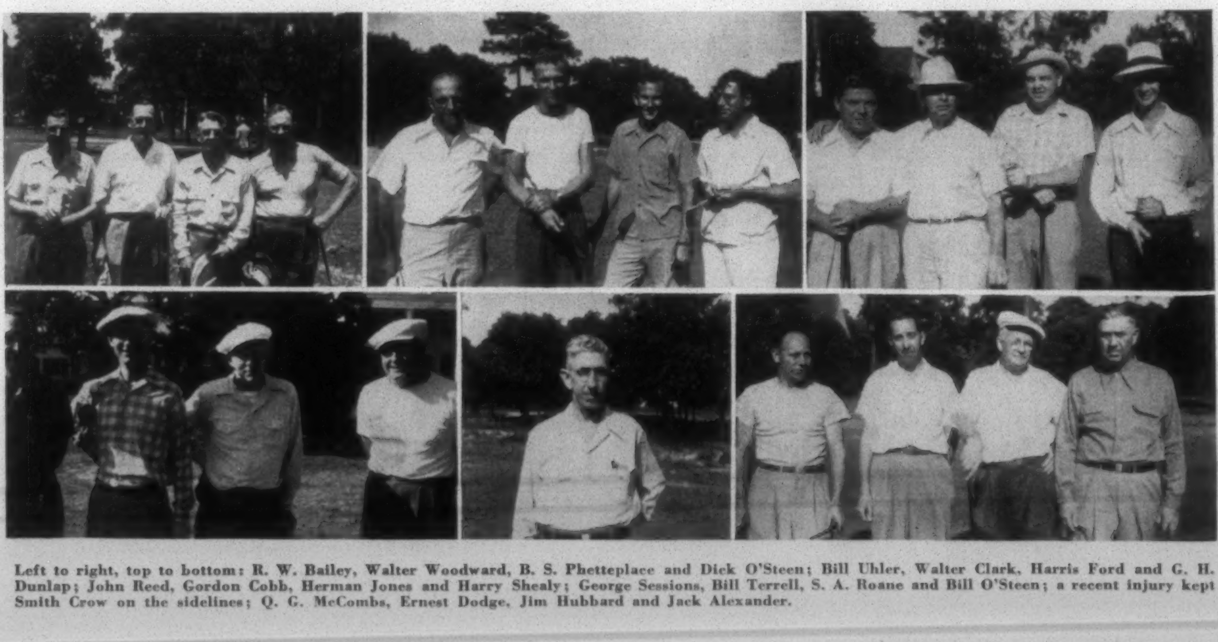
The Fiber Bonded process is based then on these two principles: first, the application of the bonding and treating material in plastic or dispersion form, then applying a tension sufficient to equalize the load, sometimes tensioning even to the point that a slight drafting occurs; and second, setting the bonding materials so that the fibers and strands are held in this condition and slippage is prevented. The application of these principles has produced quite startling results in increasing tensile strength and decreasing stretch or elongation. An increase of tensile strength of 30 to 40 per cent is obtained if the Fiber Bonded process is applied to conventional yarns and cords with a high twist. As the amount of twist is decreased the per cent of increase in tensile strength of the Fiber Bonded yarn is correspondingly increased, and in the case of roving in which just sufficient twist has been been introduced to make it possible to handle it mechanically, the tensile strength is increased considerably over 100 per cent. It is possible then with the Fiber Bonded process to considerably decrease the amount of twist below that of conventional yarns and at the same time obtain a product of higher tensile strength than the conventional yarns. It is significant that if this process is eventually carried into the fine yarn field, fabrics can be produced of high tensile strength with considerably less twist than that in the yarns of conventional fabrics.

The conceptions of the Fiber Bonded process and laboratory samples which showed outstanding merit in a testing laboratory have been in existence for quite some time. However, it was not until the chemist and the mechanic worked together that the development moved ahead rapidly, for there was no commercial equipment available to carry out the principles of the Fiber Bonded process. It took a close co-ordination of the skill of both the chemist and the mechanic to develop the equipment which would produce the Fiber Bonded products. It might be of interest to mention that over 50 different designs and models of experimental units have been built and tested. Among the units developed are those now in commercial use in our plant. They have not yielded large production per unit, at least from the standpoint of the yarn manufacturer, but they have developed the principles necessary to produce high strength yarns of a superior quality. The Fiber Bonded yarns thus produced have established themselves in the trade as products of merit and they were produced at such a rate that they are commercially successful. At the present time, although they are still in full production, these machines are considered obsolete by our own organization for both our own laboratories and the Walter Kidde Co., who are licensed to manufacture our equipment and are producing new models which are greatly increasing the speed of production and the quality of the product. It is reasonable to expect that this improvement of production machinery will continue. All of our development work up to the past few months has been in the heavier roving and cord field, and especially in those of about one-hank in size. Many bonding formulations have been developed for specific applications and many yarns have been developed for different end-products and have proven their merits in their respective fields.

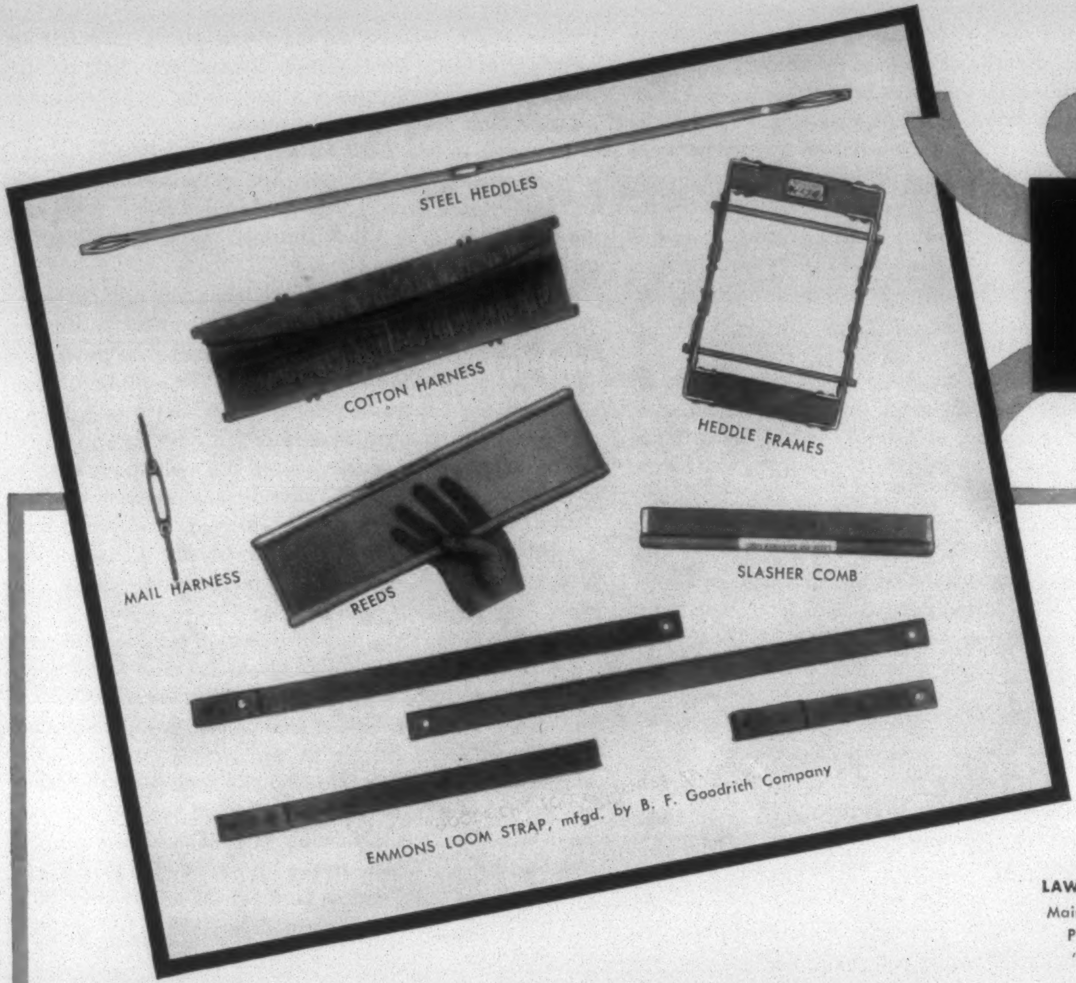
Fiber Bonded products have been developed for such end-uses as fire hose, hydraulic brake hose, conveyor belt fabric, V-belt cord, carpet yarns, shoe sewing thread, florists' twine, wrapping twine, brands, duck and webbing. The process is particularly suitable where a high tensile strength with correspondingly low stretch and small diameter are required. The application of color, either in the form of pigments or dyes, along with the bonding materials, has been developed to the point where it is satisfactory commercially. Also, formulations have been developed which give a good polish to the yarns as well as giving them increased tensile strength and color in a single operation.

It is interesting to note the changes that have taken place in the trend of our Fiber Bonded development. Originally the Fiber Bonded process was developed and applied only to the conventional yarns. It was next found that it was advantageous to use it in connection with yarns of lower twist. This led to the work with roving and the elimination of several steps in the cord manufacture, such as the substitu-

—SNAPSHOTS TAKEN DURING THE GOLF TOURNAMENT—



Left to right, top to bottom: R. W. Bailey, Walter Woodward, B. S. Phetteplace and Dick O'Steen; Bill Uhler, Walter Clark, Harris Ford and G. H. Dunlap; John Reed, Gordon Cobb, Herman Jones and Harry Shealy; George Sessions, Bill Terrell, S. A. Roane and Bill O'Steen; a recent injury kept Smith Crow on the sidelines; Q. G. McCombs, Ernest Dodge, Jim Hubbard and Jack Alexander.



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tion of a .24-hank roving for a 10/8/5. The latest step in this direction is the use of card sliver directly from the cards for the production of a Fiber Bonded cord. This Fiber Bonded cord, in a continuous process, is plastic coated to give an end-product which will equal or surpass in break factor a conventional yarn made of the same or longer staple. This particular development is still in the laboratory stage but the equipment is being built to manufacture this product on a commercial scale. The cost of producing a sash cord, venetian blind cord, or a similar item by this method as compared with the conventional braid method is obvious.

At the moment there does not seem to be a possibility of carrying the development much further in this direction for the card sliver is about as near to the beginning of the cotton processing as it is possible to go without using the bale of cotton direct.

The development in our research laboratory is also shifting in the direction of finer counts. During the past few months we have started to shift from the material in the one-hank range to 6s, 7s and 10s yarn, and some experimental work has been carried out with counts as fine as 20s. We are also developing equipment to handle these finer counts on a commercial scale and we find it is possible to increase the tensile strength 50 to 70 per cent on these yarns; and uses have already been developed for these finer yarns and the products manufactured from them show outstanding performance in their respective fields. Although the development is being extended in the direction of finer counts at the moment, indications are that it will be some time before it is extended to the fine yarns used in our dress fabrics. We do, however, have one modification of this process which is used in the dress goods manufacture; namely, the Color Bond process for dyeing, which consists in the application of color to a dress fabric by the means of pigments and resin bonding materials.

Although, as we stated earlier, the Fiber Bonded process is based on fairly simple principles, its various modifications and applications have become so extended that it is impossible for our group or any other single group to cover all of its potential possibilities.

Our present licensees who have laboratory units have developed end-products which have been proven in commercial use and are already waiting for commercial production equipment to go into full production. We have been astonished with the way this development has been received internationally. Nearly every week since this development started some foreign group or commission has visited our mills to investigate this process. We have already licensees, or negotions are in progress for licenses, in France, Holland, Sweden, Poland, Italy, India, Colombia, Mexico, Canada, Great Britain, Brazil, Switzerland, Norway, Spain, China, Belgium, Argentina, Peru and Bolivia.

We have adopted a policy of throwing our Fiber Bonding laboratories open to the service of our licensees and they are permitted to visit our laboratories at any time to keep up to date on our developments, as well as receive our counsel on their problems. At the start of our research program, which was primarily based on increasing and improving the use of cotton in the textile industry, we adopted the policy that all practical developments flowing from Dan River research would be made available to the whole industry at a reasonable royalty rate, the returns from which would assist us in carrying on this extensive research program.

Research in the Cleaning of Cotton

By DR. FREDERICK T. PEIRCE

A FRAGMENT of leaf lies hidden in a lump of baled cotton. Hammer that lump, knock it around and blow it about in a cyclone, but the bit of leaf remains snugly hidden and firmly embedded, so long as the lump remains a lump. Break the lump to bring the leaf to the surface and it very easily falls out. That is a simple, common-sense view that emerged from a long study of Lancashire "blowrooms," opening and picking machinery.

When a new surface is formed by the breaking of a lump or tuft, that action is sufficiently violent to dislodge most particles of trash and there is little gained by rubbing or blowing it about. From the newly-made surface, some cotton fibers fall out also. The chance of a particle of trash or a cotton fiber to fall from the surface of the lump or tuft depends on its clinging power. On the whole, trash is much more likely to fall away than lint, so the proportion of the trash in the stock that goes to waste in any action is much greater than the proportion of the lint that goes to waste.

When cottons of different cleanliness or grade are put through the same action, the proportions of lint and trash going to waste are roughly constant and give a measure of the efficiency of opening and cleaning in that action or machine. If one wants to measure the action of openers and pickers, one must get a measure of these proportions—first, a test method to separate and weigh the lint and trash in any sample of stock or waste, then a measure of the proportions of lint and trash in the stock that go to waste.

One cannot keep repeating these long phrases, so I must define these measures. The proportion of trash by weight in the stock is measured by its logarithm "g" which I call the "weight grade," and the change in this logarithm caused by any action is denoted by "g," which is the measure of the cleaning action. The lint loss is measured by "1," the change in the logarithm of the amount of cotton left in the stock from 100 pounds of raw stock. This is primarily a measure of opening. You need not worry about the logarithms if you do not want to make similar studies. It is sufficient to remember that "g" measures the cleaning and "1" the lint loss, depending on the opening, both proportionally, so that one can add the measures for two successive

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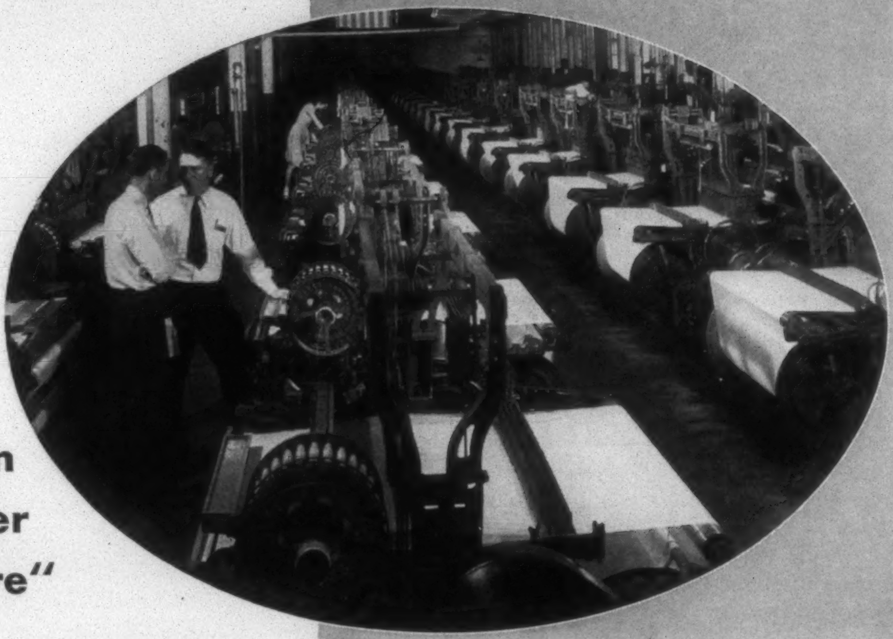

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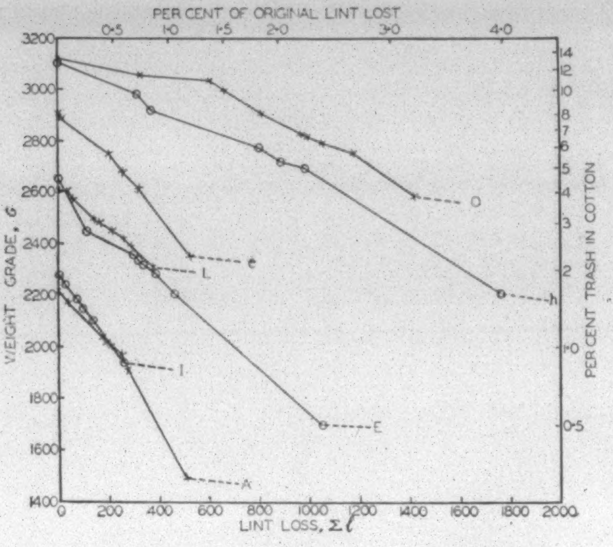
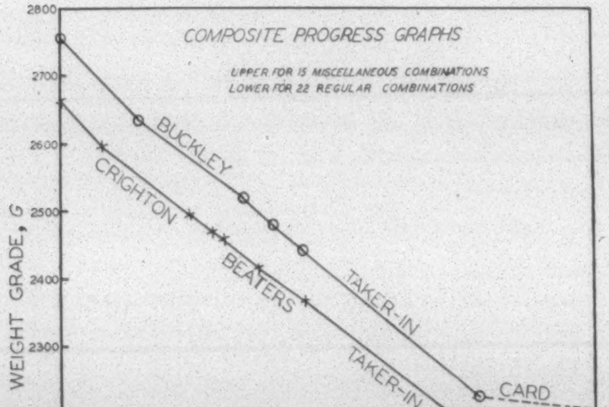


actions to get the measure of the combined action. Without such measures, the question of cleaning cotton must remain one for argument between personal opinions, which has not got it very far in a long time.

If one plots the weight grage "G" against the successive lint losses "1" as the stock goes through the openers and pickers, one gets a "progress graph" of the action of the combination. A steep slope indicates that the trash falls out relatively easily. The very dirty cottons generally show a rather steeper slope, their trash being relatively heavy and less clinging—with more sand, seeds and stalk than the fine clinging leaf particles which predominate in very high grades. It is significant, however, that the slope does not significantly change as the cleaning proceeds. It is not a question of eliminating first the easily removed trash, but of opening up more and more surface, with a constant type of trash. This is shown most clearly by composite graphs made by averaging results from some 20 waste tests.

The length of the line representing the action of a machine is a measure of its cleaning and opening power, and its uniform slope is a confirmation of the opening theory of cleaning with which we began, and on which we based the systematic study of cleaning machines. The composite graphs show the normal and average behavior of the various common machines, in common combinations. By far the most effective machine is the card licker-in, even though it takes over when all the rest have done their best or worst. The Buckley or horizontal opener is the next, a little more powerful in action than the Crighton or vertical opener, but a little less if one includes with the vertical opener the dust trunks that usually follow it. The dust trunks do no opening or cleaning, but should really be regarded as part of the preceding machine—a waste collector. One dust trunk was about as effective as 20 or 30, and flocked the cotton less. Two or three pickers do about the same work as a horizontal or vertical opener. The whole cleaning action, from bale up to the card cylinder, varies greatly but the normal behavior in our system of measures is represented by the simple relation, "g" = "1" = 557. Translated, this means that 72 per cent of the trash is eliminated at a cost of 1.3 per cent of the lint.



Having now a measure of the action of a cleaning machine and a norm or standard by which to judge it, we may study more effectively the action of particular machines and the behavior of various kinds of cotton and trash. Particular waste tests show wide variations from the normal. Sometimes the lint loss "1" is very large, with only a normal value of cleaning "g" for the machine. This may be due to nothing but bad waste collection, allowing part of the stock to go to waste, but it often is due to flocking or rat-tailing. Dust trunks and other parts in which cotton is blown or knocked around without breaking tend to flocking and excess lint loss. An overfed machine, set to produce more than it can deal with, gives a low value of cleaning "g" but relatively larger value of lint loss "1." Sometimes the waste collection is too conservative, so that the potential waste, loose trash and lint recombine with the stock. This lowers both the "g" and "1" to much the same degree. It is a pretty poor way to save lint loss. A low value of cleaning "g" with a normal lint loss "1" generally means a very clinging type of trash, a pepper of fine leaf or small fuzzy seed particles. This may be found in cotton of high grade, where the cotton has been cleaned well in ginning.

If stock is put through the same machine time and time again, the values of "g" and "1" fall off, in similar proportions, as a machine tends to produce tufts of a certain minimum size and these pass through without further effective action. One can in fact calculate the action of a machine when stock is put through it repeatedly from its observed action in the first passage, on our "Opening Theory of Cleaning." From the point of view of seeking improved methods of cleaning, great interest attaches to those cases where the cleaning "g" is unusually high, particularly if the lint loss "1" is low. This sometimes may occur in the first machines, even a bale breaker, owing to the falling out of loose sand and heavy trash not imbedded in the lumps of cotton. The significant cases were those in which, after separation by the opener, the loose lint and trash is selectively fractionated by the air currents. It is possible for an air current to carry the light fibers of cotton on with the stock and let the trash particles fall to waste. This introduces a second principle of selection between lint and trash, their air flotation, the first being their clinging power. Perhaps the most remarkable thing about the practical mill studies was the evidence that this action was so slight and rare, but there were cases where it was marked.

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be avoided and a steady streamline flow maintained. It cannot be very affective when the cotton is in lumps, but only at a very advanced state of opening, or before the cotton is compressed. The first attempt to utilize this principle was in a machine to separate lint from trash to measure trash content. This separation had been done for the first studies by a set of sieves fixed to a lamp glass in which the sample was blown violently against a grid by an air blast. To separate by air flotation, an old roving waste opener was modified to run at a high speed, and to allow the fully opened material to be carried away in a steady air flow. When this showed promise, the wider possibilities of the principle were evident and the large resources in a special department were devoted to the *(Continued on Page 70)*

New Techniques for the Inspection of Textiles

By HARRY F. SCHOENFELDER

THE classification of textile defects and the nomenclature used to describe the defects have vexed the Quartermaster Corps for a number of years; no doubt many of you in the commercial field have experienced the same problems in the production and distribution of textiles for the civilian market. The Quartermaster Corps seeks to enlist the aid of your group and any other textile group in helping to solve these problems.

The development of the Vectographs (third dimensional pictures) for use as visual inspection gauges to illustrate material defects, establish tolerance limits, and to obtain greater uniformity in the inspection of textiles and related items, goes back to the early fall of 1943, when experiments had been started on methods to establish uniform standards of inspection for all items procured at that time by the Quartermaster Corps. Prior to the early fall of 1943, when the inspection of textiles was generally performed at the Philadelphia Quartermaster Depot, instructions for the classification of textile defects were, in general, oral.

It might be well at this point to explain that defects in textiles are usually indicated by sewing a small string in the cloth along the selvage edge. These strings are the basis for deductions which are taken as penalties in accordance with the terms of the contract. Defects were strung pretty much in accordance with each inspector's own personal judgment of the degree of seriousness of the defect, off-time, without regard to the ultimate end use of the particular fabric being inspected. There were no standard defect classification charts.

Inspectors did not have a guide so that they could all string or not string defects in the various materials with a minimum of variation. Some inspectors would over-string goods, while other inspectors would under-string the same class of goods. This was also true of the contractor's inspection personnel.

First attempts to solve the problem were made in the summer of 1943, when the Quartermaster Corps started to accumulate swatches containing all the various defects of each range of fabrics procured by the Army at that time. The swatches were mounted in chart form, and were used by depot inspection personnel. At that time, practically all the final inspection and acceptance of textiles was performed at the Philadelphia Quartermaster Depot. It quickly became apparent that this was the wrong approach. First it required a tremendous amount of space to just hold the racks of samples. In the second place, we had only one set and they were too bulky to take around to the various plants in the field.

Technologists of the Quartermaster Corps, quality control staff, were assigned to the project, and a study was made to determine what degree of the various defects was to be strung and what was not to be strung. In order to evaluate properly the seriousness of the various gradations of the defects, the technologists consulted with experienced Quartermaster Corps personnel. Various experiments were conducted to obtain practical information as to the effect of the defect in the ultimate end-use of the particular cloth involved.

In the winter of 1943, final inspection and acceptance of textiles was transferred from *(Continued on Page 71)*

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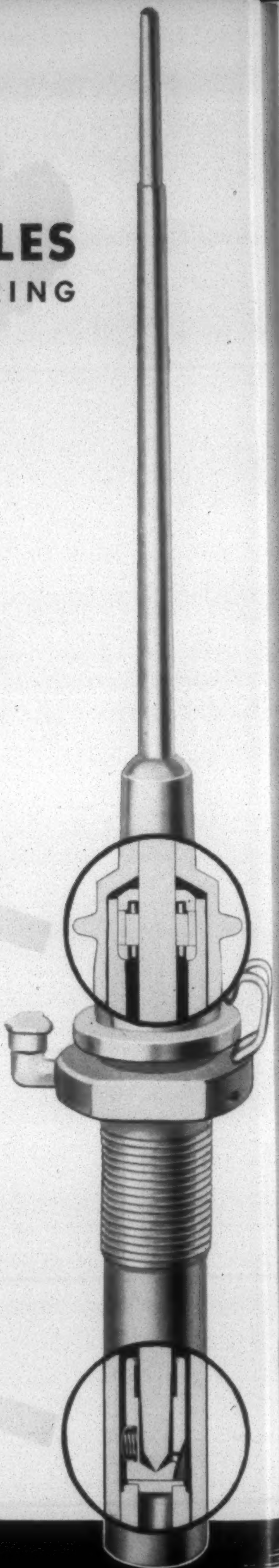

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Ten Years of Cotton Textiles

By W. RAY BELL, President

Association of Cotton Textile Merchants of New York

THE 15th annual survey of the Association of Cotton Textile Merchants of New York marks the victorious conclusion of two wars in its final year and the termination of war-dominated markets. The adjustment of military contracts was, in general, an orderly and satisfactory experience which brought few shocks and released in the final months of 1945 perhaps 50 to 60 million yards of woven cotton goods weekly to the flow of merchandise in civilian channels. Despite this diversion of output and prompt reconversion of facilities to the manufacture of commercial type fabrics, the transition period between war and peace has focused market attention, as never before, on the continuing demand of unprecedented character for practically all types and description of product. Never in the darkest days of war emergency and heavy concentration on the production of war fabrics, have the pressures from virtually all channels of distribution been so persistent or difficult of satisfaction.

While appraisal of the extent of this demand tends to become exaggerated, due to the duplication of market inquiries and the obvious over-statement of certain requirements, it is sure that, at least for months ahead, there is need for every yard of cotton cloth which can be produced. Although the theme of production has been recurrent in each review of the past five years, this is the first since 1939 in which the martial strain does not predominate. For instead of absorbing 2½ to three billion yards of the total output, it seems unlikely that military procurement agencies will exceed requirements in 1946 of around 100 million yards. Through the utilization of surplus inventories of cloth and apparel, replacement demand will presumably be held to a minimum. This large scale elimination of the military will restore much of the pre-war equilibrium between demand and supply, once the natural play of economic forces is encouraged rather than cramped by arbitrary determinations. Even under the foggy conditions of this year's first quarter, active spindle hours totalled 27,089 million and cotton consumption more than 2,362,000 bales. On the pessimistic side, these statistics of mill activity are five to six per cent below the first quarter of 1945, but in comparison with the last peacetime year of 1939 they reflect a quarterly gain of four billion active spindle hours and 551,000 bales in cotton consumption.

Only in the light of apparently boundless demand can the industry be charged with an inferior record of production. This demand stems from the war years with its huge diversions to military consumption, its repleted inventories, in warehouses and on shelves, its emptied pipelines in commerce and its unreplenished wardrobes in the homes. When to these situations of shortage is allied an increase in population of approximately nine million consumers since 1939, full employment at the highest wage levels in history, and tremendous savings, it becomes apparent why the industry and government alike are deeply concerned with measures appropriate to bring about substantial increases in the volume of production. This concern is not fresh, for it has been a constant subject of discussion and controversy over the past year. Statistics for 1945 reveal little success in meeting the issue, especially in the last half of the year when the over-optimistic forecasts of government bureaus after V-J Day failed to materialize. In one respect, the current association chart is also misleading, for it shows a gain of about 700,000 spindles in place during the year. Actually this is due to a change in the tabulation methods of the Bureau of the Census. Beginning with the August monthly report the "in place" figure was adjusted to include all cotton-type spinning spindles regardless of the kind of fiber consumed and also some *idle* cotton-type spindles which previously had been omitted. Since at least a million spindles are active on synthetic fibers or blends of various fibers, the revised data is not comparable with "in place" figures for previous years.

Except to increase the number of inactive spindles, the new conception of "Spindles in Place" is of less importance as a guide to industry capacity than the active group whose monthly record in 1945 varied from a high of 22,260,000 in January to a low of 21,552,000 in December. The average number of these working spindles for the 12 months was slightly over 22 million, or about a million less than were responsible for the peak of war production in 1942. Although a substantial improvement occurred last year in the replacements of new machinery (323,688), this total of 22 million is the lowest annual mark for active spindleage in our entire 24 years of record. That their collective activity in spindle hours exceeded any year prior to 1941 is noteworthy, in view of the many discouraging influences which hampered both production and orderly distribution throughout the year. The quarterly record of spindle hour activity and cotton consumption traces a significant decline in the third quarter, whose greatly reduced rate of operations was only slightly improved in the final quarter.

1945	Cotton Consumption (Bales)	Spindle Hour Activity
First quarter	2,489,000	28,795,000,000
Second quarter	2,386,000	27,896,000,000
Third quarter	2,114,000	25,086,000,000
Fourth quarter	2,155,000	25,548,000,000

Although cotton consumption for the entire calendar year of 1945 at 9,144,000 bales was less than six per cent under that of the previous year and total spindle hour activity was off approximately 6½ per cent, our calculations of woven cloth production have been revised to harmonize more closely with estimates of production as published in the "Facts for Industry" series by the Bureau of the Census. These current census figures segregate tire fabrics, which are quoted separately in pounds, and confine cloth reports to their proper categories in terms of linear yards. Since 1941, therefore, no official data has been available with which our square yard figures could be reconciled. Consequently, in recognition of many wartime changes in the character of production, as revealed in classified summaries expressed in linear yards, it seems appropriate that the simple formula customarily used for our calculations be weighted with approximations of the yardage actually reported in the census releases. This procedure means a downward revision in previous estimates for the war years and to avoid any misunderstanding, there is repeated below the census summaries, separately for cotton broad woven goods in linear yards and cotton tire fabrics in pounds, as contained in a release of March 7, 1946:

	Total Cotton Broad Woven Goods (Except Tire Fabrics) (In linear yards)	Cotton Tire Fabrics (In pounds)
1937	8,661,000,000	168,000,000
1939	8,287,000,000	163,000,000
1940	not given	not given
1941	10,432,000,000	240,000,000
1942	11,108,000,000	124,000,000
1943	10,573,000,000	185,000,000
1944	9,547,000,000	208,000,000
1945	8,724,000,000	220,000,000

Regardless of the point of approach, there is slight disagreement in the over-all picture which shows a decline of 20 per cent from the peak production of 1942 to the 1945 level. Except for tire fabrics whose production continued substantially above the pre-war level, duck, twills and other fabrics made predominantly for the military forces, few divisions of the industry exceeded their 1939 performance. This was especially true of staple gray goods, napped and colored yarn fabrics and specialized household products, such as towels and bedsheets.

Against this background of declining production, only the military requirements were adequately filled and they were greatly curtailed by the end of the war in August. Although stated export requirements of about 1,770,000,000 yards were halved when it came to allocation, actual shipments abroad were reported at less than 673 million square yards. Even this volume was double the pre-war rate and was made available only through mandatory set-asides. Imports, chiefly from Mexico and Brazil, increased domestic supply by nearly 80 million square yards to a round estimate of 9,186,000,000 square yards. If the two or 2½ billion square yards of military goods are deducted from this net total, it is evident that the per capita amount of cloth available for domestic consumption in 1945 was at a depression low, or less than 50 square yards.

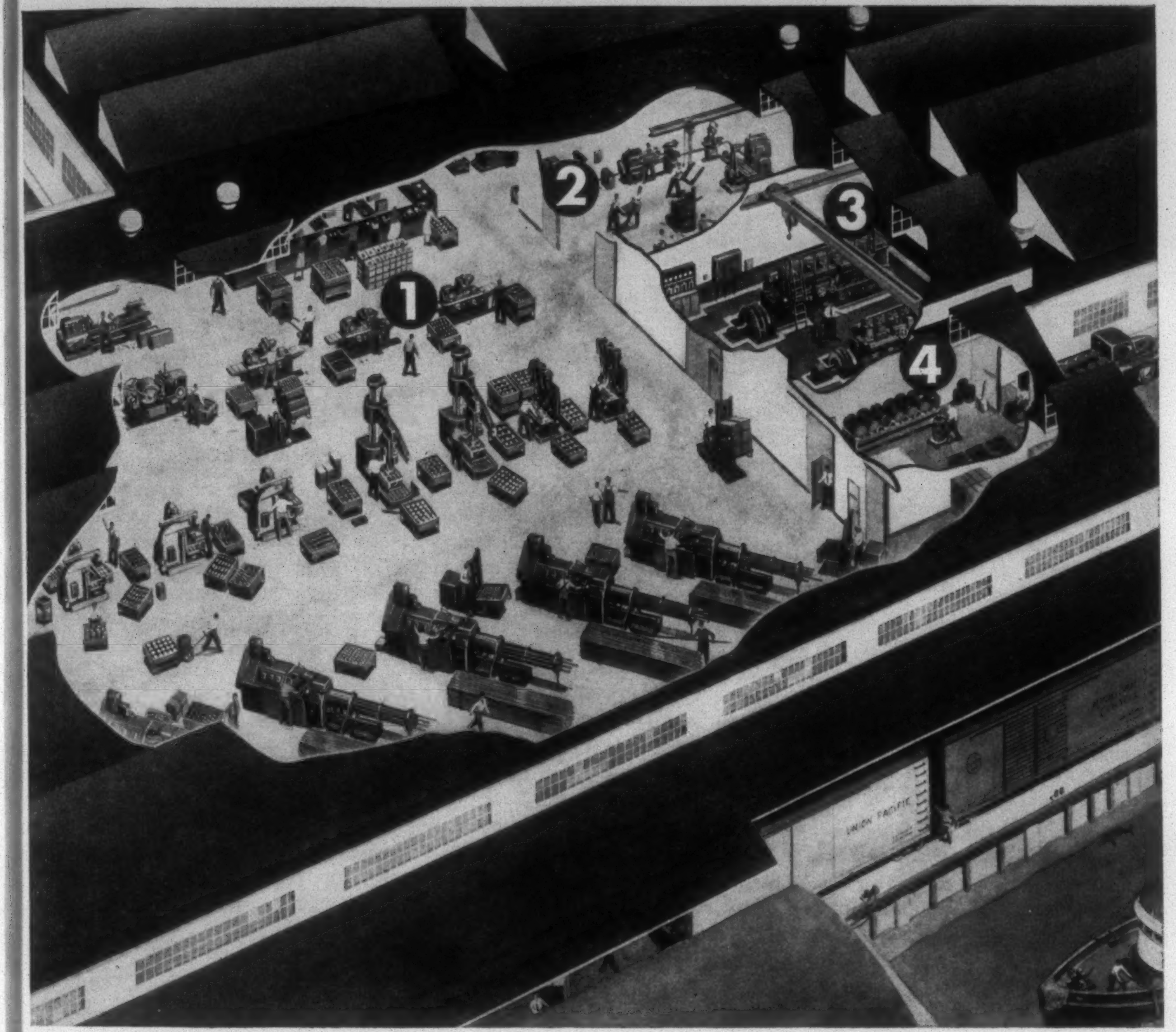
More than a year ago, in discussions between industry representatives and Office of Price Administration officials, there was mutual recognition of the widened gap between supply and commercial demand. The war was still on at the time and much equipment built for purely civilian goods had been drafted to supplement the production of war fabrics. In order to stimulate more intensive production activity, it was unanimously and vigorously urged by industry that a change be made in pricing policies which would have the effect of restoring to ceiling prices a fair earnings margin above the higher costs of labor and raw material. The recommendations were rejected by O. P. A., but by Aug. 1, after a long series of conferences, announcement was made to the industry of pending schedules, to be based on then current costs plus the O. P. A. profit formula. Despite this assurance, many divisions of the industry were left without firm prices for several months through delays in the issuance of new ceilings. By the time

(Continued on Page 63)

—TEN YEARS OF COTTON TEXTILES, 1936-45—

	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
EQUIPMENT											
Spindles in place at beginning of year	29,252,344	27,573,770	26,704,476	25,994,676	24,940,204	24,504,490	24,157,306	23,757,844	23,342,922	23,105,942	23,806,392
Increase or decrease from preceding year	1,635,168	1,678,574	869,294	709,800	1,054,472	435,714	347,184	399,462	414,922	236,980	700,450
New installation, additions and replacements	469,316	772,724	178,280	349,416	414,974	449,843	210,456	7,752	82,736	323,688	
OPERATION											
Spindles active at any time during year ending July 31st	24,664,428	25,419,110	24,774,004	23,731,053	23,585,938	23,389,454	23,607,503	23,429,252	23,018,828	22,674,852	
Spindles idle during same period	4,587,916	2,154,660	1,930,472	2,263,626	1,354,266	1,115,036	549,798	328,592	324,094	431,090	
Average number of active spindles based on twelve monthly reports	23,380,943	24,079,455	22,039,179	22,317,552	22,410,966	22,955,205	23,051,400	22,744,106	22,332,080	22,018,529	
Intermittent spindles *(being the difference between average active spindles and those active at some time during year)*	1,283,485	1,339,655	2,734,825	1,413,498	1,174,972	434,249	556,108	685,146	686,748	656,323	
Percentage relation of average active spindles to spindles in place	79.93%	87.33%	82.53%	85.85%	89.86%	93.68%	95.42%	95.73%	95.67%	95.29%	
Spindle hours run	91,766,908,000	95,409,267,000	76,252,297,000	92,570,738,000	98,279,419,000	121,968,582,000	133,536,032,000	125,413,065,000	114,984,489,000	107,325,501,000	
Hours run per average active spindle	3,925	3,962	3,460	4,148	4,385	5,313	5,793	5,514	5,149	4,874	
MARKET											
Production in square yards	8,614,160,000	9,445,914,000	7,548,977,000	9,044,979,000	9,601,899,000	11,327,903,000	12,204,611,000	11,569,224,000	10,572,421,000	9,779,238,000	
Exports in square yards	200,501,000	236,251,000	319,634,000	367,466,000	357,925,000	586,739,000	447,850,000	538,462,000	638,096,000	672,789,000	
Imports in square yards	114,195,000	147,320,000	58,282,000	111,817,000	84,344,000	61,148,000	17,643,000	19,764,000	11,188,000	79,879,000	
Available for domestic consumption	8,527,854,000	9,356,983,000	7,287,625,000	8,789,330,000	9,328,318,000	10,802,312,000	11,774,404,000	11,050,526,000	9,945,513,000	9,186,328,000	
Population at July 1st	128,429,000	129,257,000	130,215,000	131,200,000	131,970,000	133,203,000	134,665,000	136,497,000	138,101,000	139,621,000	
Available for per capita consumpton in square yards	66.40	72.39	55.97	67.00	70.68	81.10	87.43	80.96	72.02	65.79	

Data in table above was assembled by the Association of Cotton Textile Merchants of New York from Bureau of the Census reports and information obtained through courtesy of machinery manufacturers. Cloth production for the non-census (even) years prior to 1941 has been estimated to correspond to spindle hour activity during the preceding census years. Cloth production for 1941 is the War Production Board estimate of June 29, 1942, which is the basis used for subsequent calculations, with appropriate modifications for war years.



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Dyeing and Finishing

Notes on Dyes and Dyeing

By GEORGE BROUN

Application of Mordant Dyestuffs—Part 16

THE application of mordant dyestuffs originally covered the dyeing of wool, silk and vegetable fibers by employing metallic mordants, but currently this type of color refers chiefly to those which are used on wool. This article takes up the main types of mordant dyes under their chemical nomenclature, as well as that by the textile industry.

According to historians of the French textile industry, *mordant* was brought into the dyeing industry's vocabulary after it had been derived from the Latin, *modere*—to bite. The metallic salts used in mordanting textile fibers and fabrics tend to roughen them. Early dyers believed that this action opened up the fibers, making them possess an affinity for the dyeing agents used.

Mordant dyes include all types of colors which form a color lake on the fiber being processed through the application of a metallic mordant before, during or after the dyeing operation takes place. Manufacturers of dyestuffs differentiate as to the classes of mordants by listing them as chrome and alizarine types, although in some cases colors bearing the prefix alizarine actually are not chemically true alizarines. Various mordant dyes are classified as follows:

Chemical Structure of Dye	Example	Color Index Number
Anthraquinone	Alizarine Red	1027
Monoazo	Chrome Yellow O	195
Disazo	Diamond Chrome Black F	299
Oxazine	Gallocyanine	883
Tri-phenylmethane	Chrome Azurole BC	720
Nitroso	Fast Printing Green G	2
Oxyquinone	Alizarine Black	1019
Xanthene	Alizarine Green F	783

The most practical method of classifying true alizarine mordant dyes separately from the other types of mordant colors is by recognizing that true alizarine requires the use of a mordant in the dyebath; they will not dye wool, but many of the other mordant dyes will dye wool without the use of a mordant although the resultant shades posses lower fastness than if mordanted.

Mordant dyes usually are applied to wool, but may be used on silk, aralac, nylon and vegetable fibers (especially cotton). The selected mordant dyes give a very high degree of fastness on wool, comparable to the fastest types of vat and napthol colors on cotton and viscose rayon. The outstanding type of fast mordant used widely on cotton in Europe was Turkey Red, prepared by mordanting cotton with aluminum and calcium and dyeing with alizarine. This dyed yarn was imported to the United States and employed in the manufacture of household fabrics and toweling. It has since been replaced largely by improved napthol reds. Silk yarns are dyed with selected alizarine mordant dyes by processing with dichrome or aluminum mordants at low temperatures and using the pre-mordanting method (commonly known as bottom chrome) in preference to the after-chroming or meta-chroming processes, which affect the luster of the silk yarns noticeably. Mordant colors have not been applied to silk piece goods with any real success, since other types of fast colors have shown greater ease of application.

Mordant dyes are applied to wool staple stock and piece goods by all dyeing methods. In the past numerous types of metallic mordants, such as iron and aluminum, have been used; at present bichromate of soda or potassium is the chief mordanting agent. The three methods of application are bottom chrome (chrome mordant), meta-chrome (mono-chrome) and top chrome (after-chrome). The merits of each may be summed up on a practical basis as follows:

Bottom chroming, though a two-operation method and the first one worked out, still is used widely because of the closeness of shade matches obtained from lot to lot. The shades are more level, and this method should remain popular with dyers of fancy woolens in yarn and piece goods forms.

Meta-chroming is growing rapidly in use due to the increased range of colors currently available. This method gives the dyer an opportunity of seeing the shade actually being produced, whereas with the other two methods a dyer does not know what the final shade will be until operations are completed; he may be required to shade the dyed goods with a suitable acid wool color or redye the lot. With meta-chroming dyers have run lots with a lower fastness to crocking than obtained with the other methods, but this objective can be reduced to a minimum by careful selection of chrome colors and dyeing assistants now furnished by specialty chemical firms. Future development work on the meta-chrome method will be to reduce the dyeing time by improving the leveling action of chrome colors suitable to this method.

Top chroming produces very fast dyed shades, although the dyer experiences difficulty in obtaining exact matches because the final shade evolves during the chroming operation. This method is used widely in dyeing raw stock, yarns and piece goods in darker shades such as navies and blacks.

In bottom chroming, prepared material is mordanted

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with two to five per cent bichromate of soda or potassium (on weight of goods). Following a one to two-hour boil, according to type of material, two to four per cent tartar (acid potassium tartrate) is added to bath for better quality goods. The mordanted material is rinsed and dyed in a fresh bath containing one to three per cent acetic acid (56 per cent). Dyeing is started at 100-120° F., brought to a boil within 30 to 45 minutes, boiled one to two hours according to type of material being processed. Either acetic or formic acid may be used for exhausting bath. On heavier shades an extra 0.25 to 0.75 per cent bichrome is added and boiled 20 to 45 minutes longer. By careful operation the final shade can be held satisfactorily and the extra chroming will insure better fastness to scouring and fulling. To obtain more level pastel and medium light shades, the use of ammonium acetate instead of acetic acid has shown good results; use double the amount of acetic recommended.

The mordant used in meta-chroming usually consists of a compound containing sodium or potassium chromate and ammonium sulphate. Three to eight per cent of this prepared mordant is dissolved separately and entered into a bath containing dissolved mordant color at 100-140° F.; material is run ten to 20 minutes at starting temperature, then raised slowly to a boil and dyed at boil for one to two hours. A chemical reaction takes place during this meta-chrome operation in which as the bath starts boiling the ammonia is released and sulfuric acid is formed which changes the chromate into bichromate; this starts the bichroming action on the dyestuff and thereby forms a chrome color lake on the wool fiber.

There are various modifications of this meta-chrome method, but they are dangerous if used carelessly. Dissolved bichromate added directly to a dyebath containing a mordant color usually will precipitate the color, although dyers have found that by careful selection of chrome and alizarine colors they can dissolve the bichromate separately, adding sufficient ammonia to change it to a chromate, then adding the proper amount of ammonia sulfate, acetate or formate. This prepared compound will give much the same result as the prepared meta-chrome mordant. Be sure that the dyebath is made alkaline with ammonia even when ammonia sulfate is used, and always prepare the chrome dyestuff and bichrome compound in separate containers to prevent precipitation of the chrome color. Mordant (chrome) dyes which may be dyed by the meta-chrome method, with color index numbers in parentheses, are Chromate Brown EB (52), Alizarine Orange R (40), Alizarine Blue Black BA (1085), Anthraquinone Green G (1078), Anthracene Brown PGA (4), Chrome Fast Yellow O (195) and Anthracene Chrome Red B (262).

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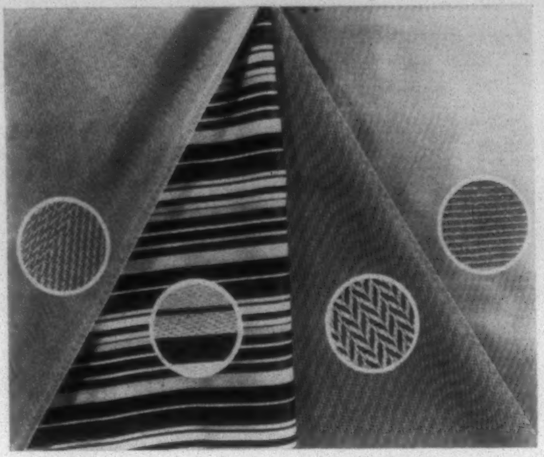

The photograph above illustrates various weaves and color combinations of Saran fabrics used for theater, transportation, shipboard, home, restaurant and office upholstery. Other applications are shoe, luggage and handbag fabrics as well as the recently developed Lumite radio grille cloth.

For top chrome the dyebath is prepared with five to 15 per cent calcined Glaubers salt and one to three per cent acetic acid (56 per cent). The prepared material is entered at 100-120° F., run ten minutes at starting temperature, then raised to boil in 40 minutes; boil 40 minutes; if dyebath is not exhausted, add one to three per cent additional acetic acid and boil 15 minutes for exhaustion. Cool bath by adding cold water and with bath at 150-160° F., add one to 2½ per cent dissolved bichrome; one-half to one per cent sulfuric acid is added on some of the chrome colors in order to obtain proper exhaust and chroming. Raise to boil over a 20-minute period, boiling 30 to 60 minutes until properly chromed. The dyed material should be rinsed cold promptly, since the chrome solution will change final shade if left standing without rinse. A majority of the mordant colors, both alizarine and chrome, dye satisfactorily by the top chrome method.

In dyeing chrome mordant colors it has been found practical to have available a list of fast acid colors which can be used for shading. The shading of chrome mordanted colors is best limited to not over one-half per cent selected acid colors, or otherwise fastness of the final shade might be impaired. For shading, a dyer can use Fast Acid Green B (667), Sulfon Yellow R, Supramine Red 2GA, Azo Bordeaux S (88), Alizarine Rubinol G (1081), Anthraquinone R, Alizarine Rubinol 3G (1081), Fast Milling Blue FFGA, Acid Fast Green Bluish (691), Alizarol Sky Blue B and Fast Wool Green S (737).

A two-year research program on the improvement of Army uniform fabrics will be undertaken by the American Association of Textile Chemists and Colorists following a decision by the A. A. T. C. C. council to accept a $40,000 government contract for carrying out the project. The investigation will be supervised by Dr. Harold W. Stiegler, the association's research director.

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TEXTILE FOUNDATION DONATIONS

Recently the North Carolina Textile Foundation, Inc., received the following letter from John W. Wallace, president of the Statesville (N. C.) Cotton Mills:

> Some time ago we subscribed $1,000 to the North Carolina Textile Foundation, Inc. We send you herewith our check for $540 which will bring our subscription up to the ten cents per spindle suggested.

This brought the total donations to the North Carolina Textile Foundation, Inc., to $734,892.17 and marks the beginning of the 1946 drive towards the ultimate goal of $1,000,000.

Many mills have not yet given the requested ten cents per spindle but we hope that they will soon follow the example of the Statesville Cotton Mills. To the average mill, ten cents per spindle is not a very large amount or too much to invest in textile education.

It is true that corporations will not be in the high tax brackets of recent years and that Federal taxes will not exceed 38 per cent, exclusive of state taxes.

It must, however, be realized that while more money will be left in the corporation treasury, the individual who receives same in the form of dividends or salaries must pay a very large percentage of it to the government.

Surtax rates advance so rapidly that many holders of textile stocks will use their influence against the distribution of funds through dividends and will look with favor upon liberal donations to improve textile education and make available to the textile mills, for the trying years which are certain to come, well educated and well trained operating executives.

Certainly no person can complain of the manner in which donations to the North Carolina Textile Foundation, Inc., are handled and are used. The funds are not placed under the control of North Carolina State College or the school of textiles of that institution. They are entirely under the control of a board of directors composed of textile manufacturers and knitters and can only be expended upon the authority of that board or its executive committee.

All persons who handle the funds are bonded and no funds can be invested except in securities which are approved by an investment committee composed of R. M. Hanes, president of the Wachovia Bank & Trust Co., R. S. Dickson, president of R. S. Dickson & Co., investment bankers, and President W. J. Carter.

No salary or compensation is paid to any officer nor is any travel expense paid. Because the officers pay their own postage, and other expenses, the books of the foundation show only $30.45 as the total expense of raising the $734,892.17.

More important than the business-like manner in which the funds have been handled is the use to which they have been put.

Every college must have a standardized salary scale governed by its income, which in the case of North Carolina State College is the appropriation made by the state legislature.

It is not difficult to secure teachers of academic subjects within the limits of the salary scale, which is $5,000 for full professors, but in the field of textiles and engineering, the type of men who should be secured as teachers can obtain more than $5,000 in industry.

There is no probability that the North Carolina legislature can be induced to increase the appropriation to North Carolina State College enough to enable it to pay $7,000 or $8,000 for full professors and if it did give North Carolina State College any such increase in appropriation, it would have to make similar increases for all the other state-supported colleges. Immediately there would be a demand for a much higher salary scale for teachers in public schools and all other state institutions and the ultimate result would be a greatly increased tax burden upon the people and industries of North Carolina.

The State of North Carolina is gradually stepping up the salary scale of teachers in both colleges and public schools, but there is no possibility that the scale will, in the near future, reach the point that it will attract outstanding men as teachers in the school of textiles or the school of engineering.

As long as the scale of salaries which a college pays is uniform, it matters little to one professor that another professor receives an additional amount from some other source.

Working upon the theory that "no college or school is any better than its teachers," the North Carolina Textile Foundation decided to utilize its funds almost exclusively for salary supplements and thereby enable the school of textiles to secure as teachers outstanding men in the field of textiles and exactly that has been done.

Dr. Frederick Peirce, head of textile research at the Shirley Institute of England, was secured and has been given a competent research staff.

Clarence Asbill has just been secured from the Callaway Institute at LaGrange, Ga., to head a department of textile machinery design.

These are only two of the well qualified men who have been brought to the school of textiles at North Carolina State College and will instruct textile students.

The J. E. Sirrine Textile Foundation of South Carolina has a larger fund than the North Carolina Textile Foundation, Inc., and the Educational Foundation of Georgia, which was sponsored by Georgia textile manufacturers upon the basis of 20 cents per spindle, has $540,000, which is a larger amount per spindle than has been donated by North Carolina textile mills.

We urge mills in South Carolina and Georgia to make additional donations to their foundations for textile education and to push their plans for outstanding schools of textiles at Clemson College and Georgia Tech.

We wish to see three strong schools co-operating with each other in textile education and textile research.

The North Carolina Textile Foundation, Inc., with $734,892.17, is still very far short of its goal of $1,000,000 and we urge mills which have not yet given the full ten cents per spindle to follow the example of the Statesville Cotton Mills and bring their donations to that figure.

Many firms in mill supplies, and other lines affiliated with textiles, have made donations but there are some who have not yet done their part or whose donation is still too small.

The day will surely come when there will be trying times in the textile industry of the South and when only those mills operated by well educated and well trained men will be able to survive.

Now is the time to make an investment in the future, and textile manufacturers should be "big" enough to realize that fact and to do their part.

When W. J. (Nick) Carter of Greensboro, N. C., conceived the idea of a foundation which would insure the best possible textile education for North Carolina young men, he set in motion forces which will ultimately have a tremendous bearing upon the entire textile industry of the South.

C.I.O. DICTATORS

The C. I. O. lost another election when the employees of the Standard-Coosa-Thatcher Co., with mills at Chattanooga, Tenn., Piedmont, Ala., and Rossville, Ga., held an election. The vote was:

For the mill	734
For the C. I. O.	494

The fact that the leaders of the C. I. O. drive are ardent supporters of the proposed F. E. P. C., which would force Southern cotton mills to employ Negroes and work them side by side with white girls, is causing employees to vote against the C. I. O.

At almost every mill the C. I. O. organizers employ a local man to solicit memberships and pay him a very handsome commission.

Most of the business representatives of the C. I. O. have been willing to sell themselves and their self-respect and do whatever George Baldanzi and the other racketeers demanded, including the acceptance of social equality with Negroes.

There was one business representative, however, who refused to be a Quisling and sell the employees of his mill down the river even for the high profit which was to be his.

M. L. Wood, business representative of Local 253, Textile Workers Union of America, Columbia, S. C., announced recently that no C. I. O. or P. A. C. (Political Action Committee) meetings would be held in the union's West Columbia hall if the meetings were to be attended by Negroes.

Mr. Wood had so much respect for himself and the white people of the mill to which he was attached that he refused to become a party to placing himself and them upon a basis of social equality with Negroes.

When Anthony Lucio of Charleston, S. C., C. I. O. organization boss and secretary-treasurer of the South Carolina P. A. C., heard that M. L. Wood had refused to help promote social equality between whites and Negroes, he became very angry and announced, *"I will see to it, and use everything in my power to remove a character of this sort from the C. I. O., P. A. C. and any other progressive organization to be formed in this country."*

Replying to Lucio, Mr. Wood said: "I am a white South Carolinian and I believe in what the Democratic party stands for. As far as ousting me as business representative of Local 253, let him go ahead and try."

Referring to his statement that the union hall would not be used for meetings attended by Negroes, Wood said "I was not speaking just for myself" since the "1,000 members of Local 253 are fully behind me, and I intend to go down the line with them 100 per cent."

He said that "instead of $1,000,000 and two years to organize the South, it will take $5,000,000 and they still won't succeed, if they don't leave the Negro out of it."

Anthony Lucio has announced, for himself and George Baldanzi and the others who have come into the South, that all of his local "hired men" will lose their jobs unless they are willing to forget what M. L. Wood was unwilling to forget, and that was that he was a "white South Carolinian."

M. L. Wood stands out as one C. I. O. local business representative who was not willing to forget his heritage of Anglo-Saxon blood and sell himself and his self-respect in order to continue to receive "pieces of gold" at the hands of Anthony Lucio and George Baldanzi, said "pieces" bring only a pittance compared to the amount they take for themselves.

M. L. Wood says that the 1,000 members of his union are solidly behind him, and we can well believe it, for there is no purer Anglo-Saxon blood than that which flows in the veins of the cotton mill operatives of the South, and we have never believed that any organization or, for that matter, any government, could force social equality with Negroes upon them.

A definite line has been drawn. On one side are Anthony Lucio, George Baldanzi and other C. I. O. leaders, who came South after a recent convention at Atlantic City, N. J., which unanimously endorsed the F. E. P. C. bill which would force Southern cotton mill operatives to work with and for Negroes. On the other side are M. L. Wood and Southern mill employees who take pride in their blood and in their ancestry.

There will be some Quislings, some local business representatives, who rather than lose the big commissions they expect to receive from Lucio and Baldanzi will be willing to sell the employees of their mills down the river and into social equality with Negroes but we cannot believe that there will be many.

MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

REIDSVILLE, N. C.—Piedmont Fabrics of Reidsville, Inc., has received a state charter "to carry on the manufacture of fabric products," with authorized capital stock of $200,000 and $300 in stock subscribed by W. B. Pipkin, Edith Pipkin and C. L. Jolly, all connected with Edna Mills Corp. at Reidsville.

WAXHAW, N. C.—Robert J. Spilman and associates have purchased Waxhaw Cotton Mills Co., a 6,256-spindle plant with 36 houses, for $312,800. For operation of the mill by the new owners, Waxhaw Spinning Co. has been chartered with a capitalization of $40,000. Incorporators of the new firm are Mr. Spilman, T. S. Coffey, Jr., and A. B. Raymer.

JOHNSTON, S. C.—Plans have been completed for construction of a worsted weaving plant of some 100,000 square feet by Deering, Milliken & Co. of New York City. Johnston Mill, Inc., will install 144 box looms with complementary machinery for the processing of wool and synthetic yarns. The plant will be under the management of Horace W. Kiser of Abbeville, S. C., and will employ some 300 persons when construction is completed early in the fall.

KINGS MOUNTAIN, N. C.—Plant No. 1 of Phenix Mills, Inc., has been sold by Burlington Mills Corp. to Fifth Operating Corp. of New York City. The 388-loom mill will be operated as DuCourt Mills, Inc., with C. G. White continuing as superintendent. Courtland Palmer is president of Fifth Operating Corp.

WAYNESBORO, VA.—Equipment in the Esmond-Virginia Co. unit at Bluefield, W. Va., in operation since 1941, is being moved to the main plant at Waynesboro. The company was unable to make satisfactory arrangements for the purchase of the building it has occupied in Bluefield.

SHELBY, N. C.—All stock of Esther Mill Corp. has been transferred to a new corporation which will operate under the same name and with the same management. The new firm has been authorized to issue 10,500 shares of stock, a substantial part of which is being acquired by New York City interests with previous investments in the mill. Founded in 1919, the plant has 11,520 spindles and 336 looms.

DUBLIN, GA.—M. T. Stevens & Sons Co. of North Andover, Mass., has purchased a tract of land on the Oconee River which is to be the site of a woolen mill. Contracts for erection of a building and for the machinery have been placed, and construction will begin as soon as approval is obtained from the government.

WINNSBORO, S. C.—Acting to relieve the housing shortage in Hogansville, Ga., and Winnsboro, United States Rubber Co. has announced plans for the construction of 131 houses and apartments for plant personnel in the two communities. The program calls for 60 houses in Hogansville and 71 houses and apartments in Winnsboro. All are expected to be ready for occupancy within 90 days. Construction will be under the supervision of J. A. Jones Construction Co., Charlotte, and the cost will exceed $800,000.

ROCKY MOUNT, N. C.—Carolina Fabrics, Inc., has been established "to manufacture textile specialties." Construction of the first unit is scheduled to begin soon. Among the organizers are Hyman L. Battle and Ronald E. Stevens, officials of Rocky Mount Mills.

LAGRANGE, GA.—Changes being effected at the Valway and Dye plants of the Callaway Mills HDV Division will provide 75,000 additional square feet of manufacturing space. Bedspreads, cotton roving and other rugs are being added to the Valway line, and increased production of items now being manufactured is planned. Carding and spinning machinery is being installed at the Dye Plant. A new office for the two plants is under construction. S. P. Rice, recently returned from the armed forces, has been named superintendent at Valway. He replaces T. L. Arnett, now general superintendent of the Valway and Dye plants.

GREENSBORO, N. C.—Common stockholders of Burlington Mills Corp. have voted to increase authorized common stock from three million to 6,500,000 shares and to authorize the directors to issue additional stock in the proposed split-up of the common on a two-for-one basis.

SPARTANBURG, S. C.—Merger of the various Reeves Bros., Inc., textile mill interests is being effected through recapitalization, reorganization and integration of the company and its subsidiaries and a split-up of the common stock. The units include Fairforest Finishing Co. at Spartanburg, Mills Mill at Greenville and Woodruff, S. C., Osage Mfg. Co. at Bessemer City, N. C., Saxon Mills at Spartanburg and Chesnee, S. C., Grace Cotton Mills Co. at Rutherfordton, N. C., Warrior Duck Mills at Spartanburg, and W. Harris Thurston, Inc., of New York City.

BURLINGTON, N. C.—Approval by the Civilian Production Administration has cleared the way for completion of the million-dollar expansion project at Celanese Lanese Corp.

CONESTEE, S. C.—Machinery, all new, is being shipped to the new woolen manufacturing plant which will be operated by Blackinton Mills, Inc. The mill will contain 1,920 spindles and 40 looms, powered by electricity, when operations begin. Dyeing and finishing equipment will be installed later. Frederick Surr is general manager and superintendent of the plant, which will employ 125 persons when the production peak is reached.

STATESVILLE, N. C.—Dottie Lou Mills, a 2,500-spindle coarse yarn plant, has been sold by Mrs. Troy Whitehead of Charlotte to Statesville Associates for approximately $125,000.

UNION, S. C.—Fair Forest Mills has received a charter to manufacture yarns with capital stock of $10,000. Officers are C. G. Hughes, president; W. R. Dixon, vice-president; M. V. Schaible, secretary; and J. Y. Powell, treasurer.

RADFORD, VA.—The board of directors of American Viscose Corp. has approved an appropriation for preparation of the plant site for the company's new viscose rayon staple

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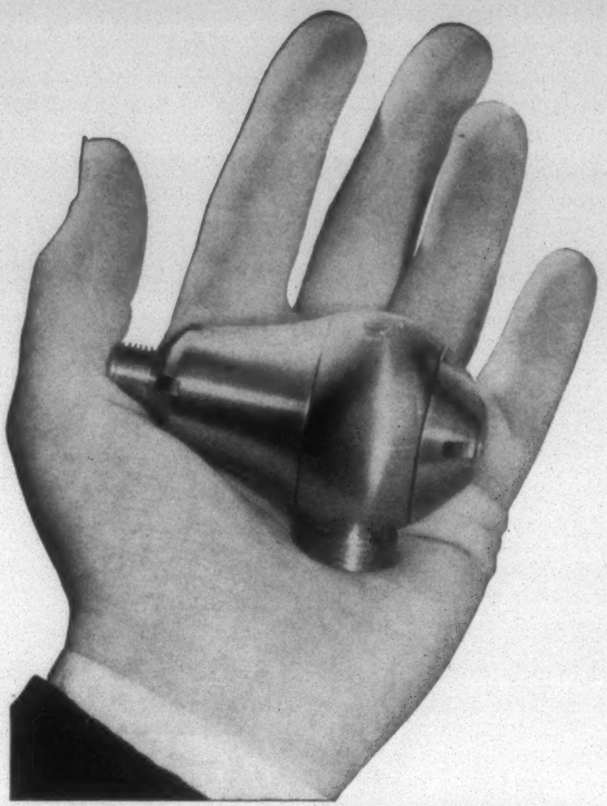

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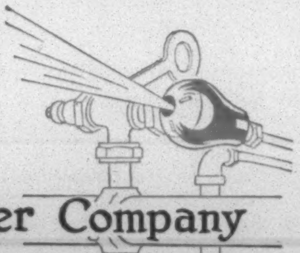

Parks-Cramer Company

Fitchburg, Mass. Boston, Mass. Charlotte, N.C.

fiber plant at Radford. This work, to be carried on during the balance of 1946, will include construction of a railroad bridge to connect the main railroad line with the plant, grading of plant site, construction of road from property line to plant and a storage building. The board authorized a viscose rayon staple fiber plant with an initial capacity of 55,000,000 pounds per year adapted to tie in with a proposed 110,000,000-pound annual capacity plant. It is planned that construction of the plant itself can be commenced in the spring of 1947.

MONTICELLO, ARK.—It is reported that the 10,000-spindle, 233-loom plant of Monticello Cotton Mills Co. has been purchased by Benjamin Greenberg of Chicago, Ill., who operates a rug manufacturing firm.

NEWBERRY, S. C.—The name of Newberry Cotton Mills has been changed to Newberry Textile Mills, according to an announcement by M. M. Clairmont, president.

It is currently reported in textile industry circles that the Kendall Co., which has headquarters at Boston, Mass., and operates several Southern plants, has obtained an option to purchase Balfour (N. C.) Mills.

The following statement was made recently by K. P. Lewis of Durham, N. C., president of Erwin Cotton Mills Co.: "So many rumors have been reported to us with respect to the possible sale of Erwin Cotton Mills Co. that we feel it advisable to state that no plan has been under consideration for the sale of any of our mills, nor is the sale or transfer or merger of our mills contemplated."

Promotions, Resignations, Elections, Transfers, Appointments, Honors, Notes on Men in Uniform, Civic and Associational Activity

PERSONAL NEWS

R. C. Lineberry has retired as master mechanic for Revolution Cotton Mills at Greensboro, N. C., following 39 years with the organization.

George W. Murphy, formerly of H. & B. American Machine Co., is now superintendent of Mary Leila Cotton Mill, Inc., Greensboro, Ga., succeeding G. R. Brook, retired. . . . William C. Hyder, formerly of Cowikee Mills, Inc., at Eufaula, Ala., is now general overseer of weaving at Mary Leila.

H. K. Gregory has been elected to the newly-created position of assistant treasurer of Skenandoa Rayon Corp., now a division of Beaunit Mills, Inc. . . . Hubert D. Kernan, until recently vice-president of Skenandoa Rayon, has joined the Rayon Producers Group as assistant to S. R. Fuller, Jr., chairman.

George E. Price, Jr., left, purchasing agent for Goodyear Tire & Rubber Co., was awarded the J. Shipman Gold Medal at the recent convention of the National Association of Purchasing Agents. The medal is awarded each year for "modest, unselfish, sincere and persistent efforts for the advancement of purchasing and for able assistance and guidance to purchasing agents in their endeavors." He has been Goodyear purchasing agent since 1936, and is a past president and director of the national association.

J. Will Long has resigned as general superintendent of Gastonia (N. C.) Combed Yarn Corp. and affiliated plants.

B. B. Gossett of Charlotte, president of Gossett Mills and Chadwick-Hoskins Co., has been elected to the board of directors of Textron, Inc., which controls Chadwick-Hoskins and Gossett through Textron Southern, Inc.

Pearce H. Baker, textile engineer for the Texas Co. and formerly one of its representatives in Georgia and South Carolina, has been assigned to the firm's Latin American technical service with headquarters at Rio de Janeiro, Brazil.

Dr. G. F. D'Alelio, left, has been appointed manager of high polymer research for Industrial Rayon Corp. He is recognized as an outstanding scientist in his field, and will take an active part in Industrial Rayon's research program in high polymer fibers. He is a leading figure in the development of plastics, and more than 230 United States patents have been issued in his name.

This month former Army colonel Robert T. Stevens, chairman of the board of J. P. Stevens & Co., Inc., received the Distinguished Service Medal for the performance of outstanding services to the Quartermaster Corps. The presentation was made in New York City by Maj.-Gen. Clifford L. Corbin.

Howard D. Townsend, for 32 years an operating official of Erlanger Mills, Inc., has been named general superintendent of Dacotah Cotton Mills, Inc., at Lexington, N. C. He succeeds Thomas B. Spencer, resigned.

L. E. Stephens has succeeded the late George C. Imes, Sr., as superintendent of Highland Mills, Inc., Griffin, Ga.

Edwin M. Allen, left, has retired from his post as chairman of the board of Mathieson Alkali Works, but will continue a a director of the company. He joined Mathieson as president in 1919, became board chairman in 1934 and held both offices until retiring from the presidency in 1944. He is a past president of the Manufacturing Chemists Association and during both world wars served on the chemical advisory committee of the Army-Navy Munitions Board and as a member of the advisory board to the chief of the Army's Chemical Warfare Service.

Geoffrey Baker, deputy administrator for price with the office of Price Administration, has resigned his post effective early next month.

BACK TO CIVILIAN LIFE: Nelson N. Baum, left, has joined Midland Fabrics Corp. at New York City following four years of Army service. He will head the company's expanson into the field of fabrics for the apparel industry. . . . Maxwell N. Hoyle, formerly an Army tank destroyer unit commander, has joined American Yarn & Processing Co. at Mt. Holly, N. C., where he is training to become third

Houghton Wool Tops

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Ashworth PIONEERS IN CARD CLOTHING

3 FACTORIES . . . 6 REPAIR SHOPS . . . 7 DISTRIBUTING POINTS

shift overseer in the mercerizing department. . . . W. J. Zimmerman, recently released after five years of Army service, has been named sales service representative for Pennsylvania Salt Mfg. Co. in the Dallas, Tex., area.

Dr. Roy S. Hanslick, left, has been appointed director of chemical research in charge of the expanded research and development department of Boger & Crawford, Philadelphia, Pa. He was formerly senior chemical engineer in the U. S. Department of Agriculture research and development department.

Six American Viscose Corp. employees were presented with the company's Salvage Award medal and citation, named in honor of Sir Samuel A. Salvage, past president and founder of the United States rayon industry, at a dinner meeting June 5 at the Vanderbilt Hotel, New York City. The awards are presented annually to employees who have performed outstanding work beyond the usual performance of duty, and are the highest honor American Viscose Corp. bestows upon any employee. The 1946 recipients of the award are Edwin T. Birsch, chief plant engineer of the company's plant at Lewistown, Pa.; Elvin L. Coe, assistant superintendent of the rayon staple plant at Nitro, W. Va.; Harry L. Dalton, manager of the Charlotte sales office; LaRue Hendrixson, viscose production manager, Wilmington, Del.; James B. McGinn, division engineer in charge of materials handling, corporation engineering department, Philadelphia, Pa.; and Joseph H. Saville, division purchasing agent, corporation purchasing department, Wilmington, Del. . . . For his contribution to the rayon industry in serving as chairman of the Rayon Producers Group from 1930 to 1946, Sir Samuel recently received an inscribed silver bowl from all the firms in the rayon industry. The presentation was made June 4 at his home in Glen Head, L. I.

W. T. Wood, plant manager of the E. I. du Pont de Nemours & Co. acetate rayon plant at Waynesboro, Va., has been named director of production. A. W. Frame, director of production for the past five years, continues in an advisory capacity. M. G. Jones, formerly assistant plant manager, has succeeded Mr. Wood.

R. J. Shinn, former publisher of *Southern Garment Manufacturer*, has joined the staff of Clark Publishing Co. as field representative for TEXTILE BULLETIN and THE KNITTER in the Southern states. For a number of years prior to establishing the garment journal Mr. Shinn was in charge of circulation in the South for *Textile World* and other McGraw-Hill magazines.

Parkman D. Howe has retired as executive vice-president of Universal Winding Co. at Providence, R. I., after 15 years with the firm. He served as treasurer until the war period, when he assumed the presidency during Robert Leeson's service with the Navy. Mr. Howe remains as a director of the company. . . . Charles G. Bell, who has had 15 years' experience in complex machinery research, has joined Universal Winding as director of research and development.

J. E. Millis, president of Highland Cotton Mills, Inc., High Point, N. C., has been awarded an honorary degree as doctor of textile science by North Carolina State College, of which he is an alumnus.

Dr. F. T. Peirce, director of research for the North Carolina State College school of textiles, Raleigh, has been named to receive the Warner Memorial Medal presented by the British Textile Institute for the best original investigation into textile technology. . . . Clarence M. Asbill, formerly a mechanical research engineer for the Callaway Institute, Inc., at LaGrange, Ga., has joined the staff of the Raleigh school.

D. D. Quillian has resigned as superintendent of Excelsior Mills at Clemson College, S. C., to become manager and superintendent of Athens (Ga.) Mfg. Co. At Athens he succeeds O. D. Grimes, resigned.

L. J. Castile of Charlotte has recuperated from an operation performed recently at Tampa, Fla., and will resume duties soon as representative for Keever Starch Co.

Harry E. Cooper, left, has been appointed manager of the Lastex yarn and rubber thread division of United States Rubber Co. He exceeds Harlow W. Waite, who is retiring after 42 years with the company and 14 years as manager of the division. Mr. Cooper has been associated with the company since 1920 as an engineer and production supervisor.

Sidney Springer, who has been in charge of the rayon processing division of Rock Hill (S. C.) Printing & Finishing Co. for the past eight years, has resigned to enter business at Los Angeles, Cal. His new address is 600 Ernst Avenue, Los Angeles.

OBITUARY

James W. Tolar, 44, former secretary-treasurer of Tolar, Hart & Holt Mills, Inc., died recently at his home in Fayetteville, N. C.

C. C. Hope, 49, superintendent of the Woodlawn Mill of American Yarn & Processing Co., died last month at his home in Mt. Holly, N. C., after an illness of four weeks. He is survived by his widow, two sons and two daughters.

Mrs. William D. Anderson, wife of the chairman of the board of Bibb Mfg. Co., died June 1 at her home in Macon, Ga., after an illness of several weeks. Surviving are her husband, one daughter and three grandchildren.

Franklyn Doe, assistant secretary of Corn Products Refining Co. for 36 years until his retirement in 1943, died recently at Rockville Centre, L. I. He is survived by his widow, one son and one sister.

W. Burnet Gosman, 66, vice-president of Stein, Hall & Co., died recently at his home in New Rochelle, N. Y. He leaves his widow, three daughters, two sisters and a brother.

Nathaniel Stevens, 89, chairman of the board of directors of M. T. Stevens & Sons Co. and a member of the firm of J. P. Stevens & Co., died June 15 at his home in North Andover, Mass. He was known as the dean of New England textile manufacturers. Survivors include one sister.

John Hollis Bankhead, 73, United States senator from Alabama and a leading legislator in the interest of cotton, died June 12 at Bethesda, Md. His death was preceded by a stroke May 24.

Charles E. Cummings, 79, assistant secretary of Raybestos-Manhattan, Inc., Passaic, N. J., died June 6. He had been associated with Manhattan Rubber since 1894.

Allgood Fallis, 60, master mechanic for Dundee Mills, Inc., for the past 35 years, died recently at Griffin, Ga. He is survived by his wife and two daughters.

T. Y. Williams, 80, a vice-president of Springs Cotton Mills, died June 5 at Lancaster, S. C., following an illness of several weeks. He was a lawyer by profession. Survivors include his widow, two brothers and one sister.

E. F. Houghton Announces Trio of New Products

To meet the demand in sizing cotton warps for additional smoothness, better fiber lay, easier weaving and increased strength without loss of elasticity, E. F. Houghton & Co., 303 W. Lehigh Avenue, Philadelphia, Pa., announces a product designated as Houghto-Wax. It is not a replacement of any ingredient formerly used in sizing but its use to some extent is said to permit a lower concentration of starch. Houghto-Wax is added to the regular size formula in the amount of about three pounds to 100 pounds of starch. Size check-up tests which have been made in mills indicate a stronger warp without decreasing elongation when Houghto-Wax is added to the size formula. This product is supplied in one-pound cakes, packed 100 to a case, convenient to use without the necessity of weighing.

A new product in its Surfax line of wetting agents has been announced by the company. Surfax S is a one-piece product which serves as a combined softener and sanforizing agent

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EVERY YEAR MORE PEOPLE DECIDE LEATHER IS BEST

for many applications. It is a combination of saponifiable and unsaponifiable oils soluble in all proportions in water and has been found particularly applicable for the finishing of heavy cotton fabrics, such as denims or coverts where an oil softener to produce proper feel and finish, plus a rewetting agent, have been used. It is also being found useful in the finishing of knitted fabrics, such as underwear cloth, which requires a soft feel and, at the same time, must be absorbent. Surfax S may be used in any bath having a pH above seven and is compatible with the ordinary materials used in finishing. It is non-oxidizing; fabrics treated with it will not discolor nor develop disagreeable odor when stored.

A new cationic softener manufactured by Houghton and having a wide range of application is Softex A. P. This product is a soft jelly-like paste soluble in all proportions in water and having a pH working range of three to eight. It has been found particularly applicable in solutions containing acid and neutral salts where ordinary softeners cannot be used. Full information will be furnished on request.

Griptred New Product For Non-Slip Flooring

Production of Griptred, a non-slip safety flooring and protective covering material for metal, wood and concrete, has been converted to peacetime commercial uses by the chemical products division of Goodyear Tire & Rubber Co. A combination abrasive aggregate and plastic binder which, during the war, was found to be invaluable on Navy vessels around gun mounts, on Navy passageways, flight and hangar decks, Griptred is considered ideal for any surfaces where safety under foot is needed. Griptred comes in a choice of six colors. The special abrasive aggregate, it is said will withstand crush loads in excess of 7,000 pounds per square inch. More than two million strokes by power driven stiff fiber brushes on Griptred applied to steel plate and submerged in a strong soap solution, have been said to have no noticeable effect on the material.

Fair Trade Council Plans New Publications For Fall

Five publications are being planned by the American Fair Trade Council for this year. They will cover the most important and interesting phases of fair trade and council activities. Publication dates will be announced. *The Law Of Fair Trade* will cover court actions on fair trade cases and will be designed primarily for the legal profession. *The Consumer's Stake In Fair Trade,* a popular treatment of fair trade from the consumer standpoint, will be designed to dispel misconceptions about fair trade entertained by consumers.

The State Fair Trade Laws, first is-

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sued in 1942 and now out of print, will be a summary of fair trade statutes and court decisions, incorporating amendments and new cases. It will be completed after adjournment of the 1946 legislatures. *Speaker's Manual* will be designed to fill a need among speakers called upon to address small groups on fair trade. *Schools Of Business Administration* will provide an outline series of material for use by heads of marketing departments in schools and colleges.

X-P Expendable Pallet Is Product of Techtmann

Greater economies in shipping have been forecast for manufacturers using the new X-P Expendable Pallet manufactured by Techtmann Industries, 714 West Wisconsin Avenue, Milwaukee 1, Wis. The manufacturer claims that a 60 per cent reduction in weight has been achieved in the new four-way pallet by the use of a double corrugated board top supported on square or round wood blocks. The entire top and block ends are dipped in a water-resistant adhesive which seals off moisture from the load.

Loads of 4,000 pounds have been carried on the X-P Pallet without failure, according to Techtmann. The manufacturer says, further, that tests show that this pallet will survive a number of trips with appreciable damage under normal conditions of shipment by rail or truck. Maximum load stowage is attained in the standard 42 by 48-inch size, since multiples of these dimensions nearly equal the widths of truck and box car bodies. Other sizes and double faced pallets are available with block spacings to suit users' life equipment.

New Multiple V-Belt Drive Booklet Available

How The Dominant Drive Speeds Production, Reduces Costs is the title of a 16-page, illustrated booklet recently published by the Multiple V-Belt Drive Association. Written for laymen, the booklet does not go into engineering details of the Multiple V-belt drive. Instead, it presents the results of these engineering features in terms of operating advantages to drive users. These advantages are covered in separate chapters on delivered horsepower, drive durability, adaptability to fluctuating production schedules, savings in man-hours and shop space, and economy of installation and maintenance. The booklet is of special value to executives and foremen responsible for efficient and economical plant operation. It is available on request, without charge, from the national headquarters of the Multiple V-Belt Drive Association, 22 West Monroe Street, Chicago 3, Ill.

Link-Belt Opens Sales Office in Birmingham

Link-Belt Co., Chicago, manufacturers of materials handling and mechanical power transmission machinery, has opened a new sales office at 823 Comer Bldg., 2100 Second Avenue, N., Birmingham 3, Ala. C. C. Wiley, district sales engineer, will be in charge. The new office was opened by Link-Belt in order to facilitate service in the Birmingham area.

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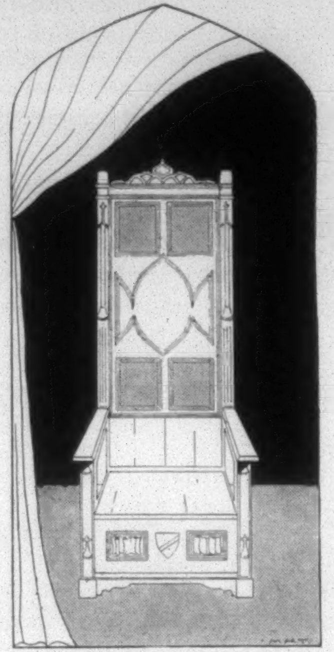

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Grinders May Receive Surplus Corn

Some hope that the critical shortage of corn starch may be alleviated soon results from a report that Under Secretary of Agriculture Norris Dodd has assured a group of textile industry representatives that enough surplus corn will be provided to starch grinders to meet immediate needs of mills. A conference was held in Washington June 13 between Mr. Dodd and a group of mill men and purchasing agents led by Dr. William P. Jacobs, president of the American Cotton Manufacturers Association, during which attention was called to the desperate supply situation. A. C. M. A. headquarters, however, warns that "extreme care is urged in conserving and stretching out your starch supply, because it is felt that the industry cannot rest easy until the new corn crop is marketed."

The office of Economic Stabilization has presented a proposal to the Office of War Mobilization and Reconversion which would set aside six million bushels of the 34 million bushels of government-owned corn for the wet millers. In addition, the Civilian Production Administration has asked the Department of Agriculture for authority to ration corn starch to industrial users, with preference to the textile and paper industries.

The corn milling industry is faced with a complete suspension of operations which would paralyze the vital reconversion program and seriously affect our now short food supply. Several companies in the industry are already shut down or operating on a reduced schedule while others, including the largest member, are also rapidly approaching complete shut down. High officials in the Department of Agriculture, O. P. A., and Civilian Production Administration in Washington are well informed on this whole situation and are considering several programs that will supply corn to the corn wet milling industry.

A relatively small amount of corn is required to keep the corn wet milling industry going. Slightly over 40 million bushels of corn is needed to operate the entire industry until the new crop is harvested. This assumes continued operation on the present permissible basis established by the recent corn order which limits it to 80 per cent of production during the first six months of 1945. Government statistics show that well over one billion bushels of corn were still on farms as of April of this year so that the amount of corn needed to keep the industry operating would be comparatively easy for the government to obtain. The removal of grain ceilings, another government bonus procurement plan, or merely a government set-aside directive would be sufficient.

Many essential industries are already in a critical position because the largest company in the industry was shut down by a strike for a period of seven weeks early this year and could not recover this lost production for its customers' inventories through the refusal of the government to permit it to do so under the terms of the government corn order which went into effect after the strike had been settled but before this lost production could be recouped.

The O. P. A. ceiling price on corn has made it more profitable to feed corn to livestock and poultry than to sell to industries at legal ceiling prices. Early this spring the government recognized this situation and instituted a 30 cents per bushel bonus program for the purpose of obtaining corn for the wet milling industry and for relief purposes.

Meetings were held in Washington between officials of the Department of Agriculture and this industry to allocate the corn obtained. While this program was still under way the famine relief program turned more critical and government officials felt that this emergency superseded the needs of this industry so that the entire 34 million bushels obtained through the bonus program was earmarked for famine relief. This left the corn wet milling industry back where it started and with no program by the government for insuring operation for essential industries through the summer months.

During May, about six million bushels of this bonus corn was sent abroad as grain, with approximately ten million bushels retained in this country for processing into corn products for export, thus leaving some 18 million bushels still in this country. Due to the uncertainty of sufficient processing facilities and supplies abroad and the advent of the new domestic wheat crop which is more suitable for famine relief, it is very doubtful whether this 18 million bushels of corn will be sent abroad. In this event it would be immediately available for the purpose for which it was originally accumulated, namely, for the corn wet milling industry. The wet milling industry has been very aggressive in obtaining its corn supplies and it is only because of this that it has been able to operate this long. All companies have stepped up their corn purchasing departments and have used every legal method to keep going. Some have even recruited large groups of salesmen to cover the entire cotton belt as additional corn purchasers. In effect, the industry has used every legal means and all its ingenuity and manpower to obtain corn supplies to process into finished products for which the demand is so tremendous that it could not possibly produce the needed quantities if operating at capacity.

Ten Years of Cotton Textiles

(Continued from Page 46) the action was concluded in January, further advances in both raw cotton and labor had made the new ceilings obsolete as measures of current value. Additional conferences and official studies brought revisions on March 8 of this year, supplemented by incentive premiums of 5 per cent on particular classifications of product which had been certified as essential to the domestic economy by the Civilian Production Administration.

When war ended, and for several months thereafter, cotton textile interests were given every reason to expect a larger measure of freedom in the selection and distribution of their products. With commendable speed the War Production Board, since renamed the Civilian Production Administration, either revoked outright or greatly simplified most of its regulations. Spindle freezes and yarn distribution regulations were totally eliminated soon after V-J Day. The L-99 order which dictates what cloth looms may produce was pared down to a shadow of its wartime statue. The regulations governing distribution were simplified so that the M-317A order merely required that the needs of bag manufacturers and the export trade be covered. Certain low-end clothing items were retained in the M-328B program. Hope prevailed that the market might be free of all control

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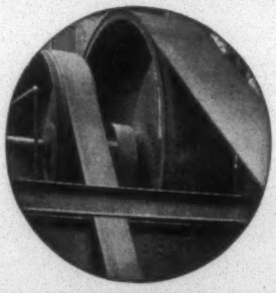
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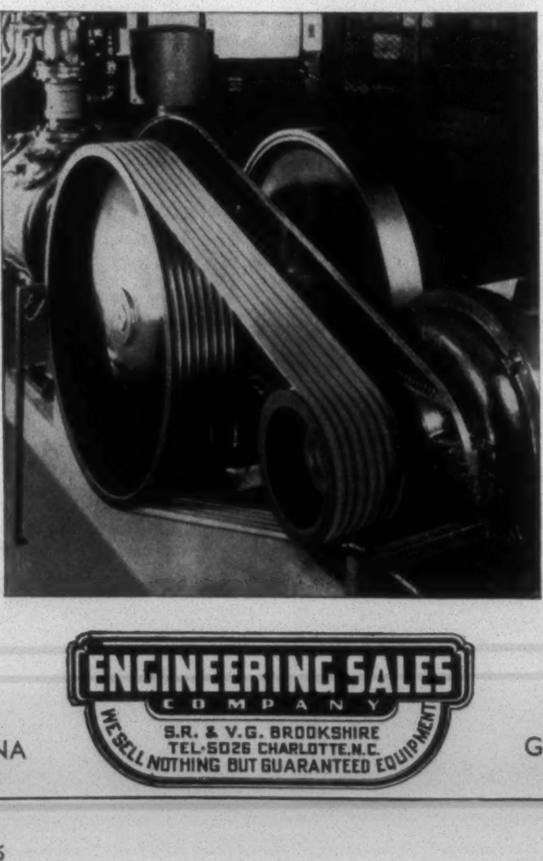

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as to production and distribution by the end of 1945 or by early 1946.

Unfortunately this hope could not be realized. The disappointingly low production in relation to demand for goods of the last half of 1945, while in part attributable to labor supply, nevertheless was in large measure the result of the indefensible delays and unrealistic price policies of O. P. A. Such tactics deepened the shortage and inevitably resulted in a resurgence of C. P. A. orders. Cotton yarns and cloths have been brought back under full production and distribution control. Set-asides have been amplified to cover many special interests such as users of industrial fabrics, agricultural materials, work clothing, and other items, while provisions for bag manufacture, the low-end apparel programs, piece goods programs, and Canadian and general export were continued or enlarged. A new wrinkle going beyond wartime regimentation has been the requirement that given percentages of certain set-asides be sold in the gray, while a tie-in with O. P. A. regulation penalizes price-wise that which is already made an offense by C. P. A. Yarns have been controlled in a more complicated manner than ever before. The result is a growing burden of regulation, exceedingly difficult for the most skilled to comprehend and apply, and often ill-suited to real needs of the vastly different peacetime market. It is a burden heavier than ever the industry bore in time of war.

This review would hardly be complete without consideration of the vast changes which have taken place and are now continuing in the structure of the cotton textile industry. This, too, while based on scarcity, has been fostered by government tinkering with price and distribution, which has vastly accelerated an earlier trend of lesser tempo, extending over many years, in the direction of integrated operation. Mills which had been subjected to long delays in correcting inequities of gray goods pricing have for years been seeking to offset losses or break-even conditions by undertaking the risks and responsibilities of finishing their own fabrics. Converting, bag manufacturing, manufacturers of apparel, dry goods wholesale firms, and sundry other customers of the industry, cut off from normal supply sources, have at the same time reached back to purchase mills. The ownership of upwards of 3.6 million spindles and 75,000 looms has changed in the period from 1943 to date, according to recent compilations. Beyond this are instances of horizontal groupings of mills. Like integrations are found at all levels of textile distribution where companies are reaching either forward or backward in order to consolidate or strengthen their positions under abnormal and artificial conditions of pricing distribution. The evidence of history in textile shows that many of these changes were well founded and desirable. One has only to recall the changes that have taken place in recent decades in the merchandising of sheets, pillowcases, towels, surgical supply fabrics, men's wear items and the like to discover that this is nothing new. Nevertheless the pace of change has been so greatly speeded that only the test of time will tell whether some individual integrations will or will not prove economically sound. At any event, there seems little doubt that the gray market is being permanently shrunk to lesser size and that revolutionary changes in production and distribution patterns are taking place. Our greatest concern as this tendency continues is that the textile industry shall not become too greatly impaired by the re-orientation of many of its productive units

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The first year of peacetime markets—for it is now very nearly a year since Japan surrendered—has thus been one of vast readjustment in the cotton textile industry. There have been many complications and there still remains a heavy burden of regimentation and control which must be shouldered until the way to a more balanced market can be attained, and government regulation can be brought around by painful negotiation to a more constructive policy. Nevertheless the cotton textile industry is making real progress. It is developing new and far-reaching plans for the retention of old markets, the exploration of new, the creation of better products and of new products, and the greater utilization of cotton, alone or in combination with the newer raw materials. It is attracting new capital and new skills. It is active in the rehabilitation of its war-worn equipment, in creating and planning new merchandising methods. With the help of more liberal government policies, it may expect to go forward to levels of attainment that will challenge even its indispensable services to the nation during the critical war years.

Plastic Coated Paper Fiber Yarn Evolved

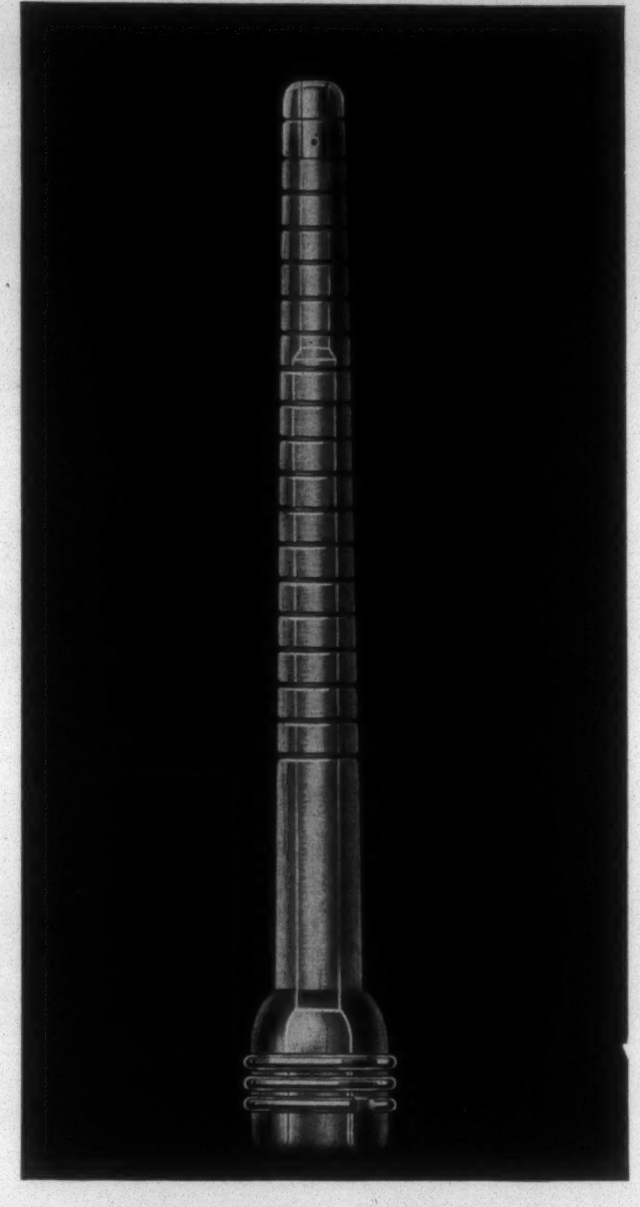
Vinyl butyral, plastic textile coating and interlayer material for safety glass, has been developed to the stage where it can be applied to paper fiber yarns for use in automobile seat covers, rugs and mats with greatly improved resistance to water, wear, skidding, mildew, fading and dirt, according to Monsanto Chemical Co., St. Louis, Mo. The paper twine can be woven on standard rug mill equipment after application of the coating, it is said. The process of coating the paper twine has been established by technologists of the Worcester (Mass.) Plastic Coating Co., which is now producing the coated twine in limited quantities. Equipment is just emerging from the pilot plant stage and some time may elapse before the new product becomes generally available.

Textron, Inc., Reports Consolidated Net Loss

For the year 1945, Textron, Inc., reported a consolidated net loss based on the parent company and all subsidiaries filing separate tax returns, according to Royal Little, president of Textron. For the quarter ending March 30, 1946, consolidated net earnings, not including Nashua Mfg. Co., amounted to $185,000, based on filing separate tax returns, or $310,000, based on filing a consolidated return. For the six months ending May 4, 1946, Nashua Mfg. Co. net earnings after taxes were $588,000. As of today, Textron owns over 100,000 shares or approximately 95 per cent of Nashua's outstanding common stock.

Directors of Industrial Rayon Corp. have called for a redemption on July 8 of all outstanding shares of $4.50 preferred stock, Series A. The outstanding shares have a par value of $9,750,000 and are being called at $104 plus accrued dividends.

The British textile industry, working about 60 per cent of capacity, is devoting more effort to new finishing techniques than to manufacturing processes, according to Gilbert I. Verney, president of Verney Corp., textile manufacturers.



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Index to Advertisers

Page

—A—

American Cyanamid & Chemical Corp. 31 and 41
American Moistening Co. 25
American Paper Tube Co. 93
Armstrong Cork Co. 17
Ashley Lead Burning Co., Inc., Joe W. 50
Ashworth Bros. 57

—B—

Bahnson Co., The 8
Baily & Co., Joshua L. 82
Barber-Colman Co. 4
Barnes Textile Associates 89
Best & Co., Edward H. 72
Borne, Scrymser Co. 14
Brooklyn Perfex Corp. 67
Bruce Co., E. L. (Terminix Div.) 76
Burkart-Schier Chemical Co. 80
Burlington Engineering Co. (Graham Chem. Co. 85
Butterworth & Sons Co., H. W. 49

—C—

Carolina Refractories Co. 89
Carter Traveler Co. (Div. of A. B. Carter, Inc.) 79
Charlotte Chemical Laboratories, Inc. 78
Charlotte Leather Belting Co. 2
Ciba Co., Inc. 33
Clinton Industries, Inc. 57
Cloverleaf Mfg. Co. 70
Cole Mfg. Co., R. D. 55
Commercial Factors Corp. 3
Curran & Barry 82
Curtis & Marble Machine Co. 74
Cutler, Roger W. 10

—D—

Dary Ring Traveler Co. 80
Dayton Rubber Mfg. Co. 9
Denison Mfg. Co. 85
Dixon Lubricating Saddle Co. 80
Dodenhoff Co., W. D. 92
Draper Corporation 5
Dunning & Boschert Press Co. 89
DuPont de Nemours & Co., E. I.,
Dyestuff Division 27

—E—

Eaton, Paul B. 66
Emmons Loom Harness Co. 37
Engineering Sales Co. 53

—F—

Fuller, Frank F. 42

—G—

Gastonia Industrial Diversification Commission 14
Gastonia Roller, Flyer & Spindle Co. 85
General Chemical Co. 19
General Dyestuff Corp. 23
Gossett Machine Works 83
Greenville Belting Co. 66
Gulf Refining Co. 39

—H—

Hanks, W. E. 87
Henley Paper Co. 62
Holbrook Rawhide Co. 87
Houghton Wool Co. 57
Howard Bros Mfg. Co. 18
Howard-Hickory Co. 81

—I—

Industrial Cooling & Moistening Co. 89
Iselin-Jefferson Co. 72

Page

—J—

Jarrett & Co., Cecil H. 14
Johnson Chemical Co. 85

—K—

Keever Starch Co. 60
Keystone Belting Co. 82

—L—

Laurel Soap Mfg. Co., Inc. 81
Lawrence Leather Co., A. C. 59
Luttrell & Co., C. E. 66

—M—

Marquette Metal Products Co. 44
Mathieson Alkali Works 90
McCaskie Co., Wm. 89
Merrow Machine Co., The 89
Mill Devices Co. (Div. of A. B. Carter, Inc.) 79
Montgomery & Crawford, Inc. 60
Mount Hope Machinery Co. 75

—N—

National Aniline & Chemical Co. 11
National Ring Traveler Co. 64
Neisler Mills 82
New England Waste Co. 55
Noone & Co., Wm. R. 69
Onyx Oil & Chemical Co. 26

—P—

Page Belting Co. 70
Parks-Cramer Co. 55
Peach & Co., D. W. 83
Penick & Ford, Ltd. 78
Piedmont Processing Co. 82
Proctor & Schwartz 16

—R—

Ray Chemical Co. 83
Raybestos-Manhattan, Inc. (Manhattan
Rubber Div.) 24
Raybestos-Manhattan, Inc. (North Charleston
Plant) 79
Raymond Service, Inc., Chas. P. 67
Rice Dobby Chain Co. 74
Riverside & Dan River Cotton Mills 22
Roy & Son Co., B. S. 64

—S—

Sandoz Chemical Works, Inc. 43
Scott Testers, Inc. 73
Seydel-Woolley & Co. 57
Simmons Plating Works 85
Sinclair Refining Co. 28
Sirrine & Co., J. E. 77
Smith, Drum & Co. 51
Solvay Sales Corp. 66
Socony Vacuum Oil Co. 47
Southern Radio Corp. 6
Southern Spindle & Flyer Co. 89
Southern Standard Mill Supply Co. 66
Staley Sales Corp., A. E. 13
Stein, Hall & Co. 55
Sterling Ring Traveler Co. 76
Stevens & Co., Inc., J. P. 82

—T—

Terrell Co., The 87
The Stanley Works 61
Tide Water Associated Oil Co. 21
U S Bobbin & Shuttle Co. 15
U. S. Ring Traveler Co. 68
Universal Winding Co. 7

—V—

Virginia Smelting Co. 71
Vogel Co., Joseph A. 78

—W—

Wallerstein Co., Inc. 87
Warwick Chemical Co. Back Cover
Water Tank Service Co. 85
Wellman Operating Corp. 87
Wheeler Reflector Co. 20
Whitehead Machinery Co., Troy 1 and 34
Whitinsville Spinning Ring Co. 81

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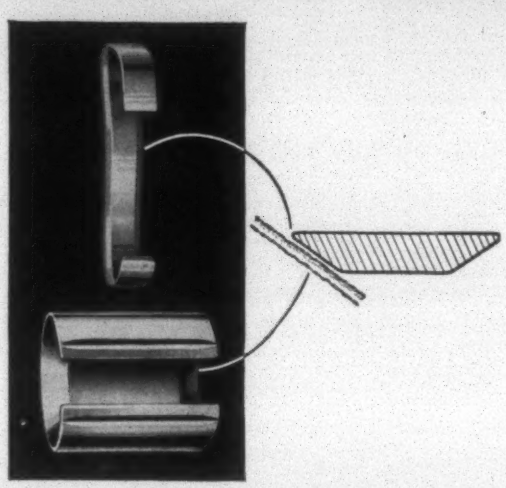

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Tufted Textile Men Hold First Convention

R. Carter Pittman of Sparks-Pittman Co., Dalton, Ga., was re-elected president of the Tufted Textile Manufacturers Association at the association's first convention at Lookout Mountain, Tenn., May 31-June 1. More than 350 members, their selling agents and guests assembled at Lookout Mountain Hotel for the event which marked a milestone in the growth of the industry.

Other officers elected were: vice-presidents, Jack Strain, Redwin & Strain, Dalton, Ga.; Thomas J. Brown, Georgia Textile Co., Calhoun, Ga.; Leon Brock, Skyline Mfg. Co., Boaz, Ala.; and James Marcus of Aldon Rug Mills, Philadelphia, Pa.; treasurer, J. T. Bates, Bates Candlewicks, Dalton, Ga.; directors, M. H. Berry of Berry Bedspreads Co., Atlanta, Ga.; M. W. Wiesen of Lawtex Corp., Dalton, Ga.; Joe McCutcheon of J. & G. Bedspread Co., Ellijay, Ga.; E. J. Moench, Tennessee Tufting Co., Nashville, Tenn.; Ira Nochumson, Morrill Mfg. Co., Dalton; Arthur Richmand, Ann Lee Chenilles, Dalton, Ga.; A. B. Tennenbaum, Blue Ridge Spread Co., Dalton, Ga.; Paul Shoffner, Hy-Way Arts, Calhoun, Ga.; Fred Westcott of Cabin Crafts, Dalton, Ga., and Walter McCarty of McCarty Chenille Co., Chatsworth, Ga.

Delivering the president's address, Mr. Pittman said the tufted textile men had "rebuilt and regained a measure of self-respect and are led to believe that we are commanding respect from others." Of the wartime bout between the industry and O. P. A., Mr. Pittman maintained that "intelligent price control has never been opposed by our industry, but regimentation into impossible patterns is another matter entirely." He expressed the belief that there will have to be good and sufficient reasons for agency officials to throttle the industry now that it has become articulate through an association. Reviewing the association's growth during its first year, Mr. Pittman reported it had increased from a charter membership of less than 30 members until around 70 per cent of the gross volume of tufted products is represented.

Dr. Claudius T. Murchison, president of the Cotton-Textile Institute, Inc., another speaker, declared that "the most dangerous cloud on the economic horizon today is the philosophy of scarcity and the procedures which are being followed by the government to nourish this philosophy and give it the appearance of reality." He added that the entire productive capacity of America "has been operating at record heights and under peacetime conditions for nine months." Recalling the cotton textile industry's trouble after World War I, Dr. Murchison said the one bright spot then was the swift growth of the candlewick and chenille industry. He predicted a slow but steady improvement in supplies during the last quarter of 1946.

On the second and last day of the convention, Cong. John S. Wood of the Georgia ninth district and Cong. Malcolm G. Tarber of the Georgia seventh district; Harry Riemer, editor of the *Daily News Record,* Larry Kunstler of *Linens & Domestics,* both of New York City, and Guy Hughes of the American Institute of Laundering, Joliet, Ill., addressed the session. Mr. Riemer related observations made during a special mission for the Army Quartermaster Corps in the South Pacific and Japan.

The necessity of a trade association as an integral part of all progressive industries was stressed by Mr. Kunstler. He sketched the growth of the bedspread industry from the days of the 85-cent spread to the present with a potential retail volume of 100 million dollars annually. Stressing the need of maintaining the national income, he said that to do so industry must double its 1940 production.

American Viscose Sponsors Rayon Seminar

An advanced seminar on rayon for deans and instructors representing eight of the country's leading textile schools was held at American Viscose Corp.'s textile research department at Marcus Hook, Pa., the week of June 3. Forty delegates attended the meetings, which embraced every major phase of processing rayon, both filament yarn and staple fiber, and the use of rayon in all textile fields. The seminar was conducted under the auspices of the educational branch of Viscose's textile research department. Comprehensive studies of the handling of rayon on the cotton, worsted and woolen systems, and the weaving, knitting, dyeing and finishing of rayon fabrics were undertaken by the delegates, in addition to lectures given by Viscose's researchers.

Desirability of a single regulation for the identification of textile fibers of any and all types was emphasized by Francis E. Simmons, Washington manager of Viscose. He reviewed the effect on the industry of numerous government regulations, particularly those affecting textile research where opportunities exist for textile school participation. "The new rules for azlon will still leave uncovered such fibers as nylon, vinyon, glass fibers and some others."

Methods by which uniformity and quality of viscose process yarns and staple fiber are controlled were considered at another session of the seminar. The subject was demonstrated. Prior to witnessing the testing procedures at the standards department laboratories, the members of the seminar heard talks by K. M. Currier, assistant manager of the textile research department, and L. S. Converse, director of the standards department. Mr. Currier explained precautions taken during manufacturing to assure production of yarn according to specifications, and Mr. Converse related the chemical and physical test used to measure the quality and characteristics of intermediate and finished products.

Rene Bouvet, head of the textile research department of Viscose, asserted that fabrics cannot escape being deeply influenced by the political and economic turn of events in this country. "It is generally conceded," he said, "that future scientific advancements and their applications will issue largely from research organizations, supported by fiber producers and by the textile trade and from textile technologists."

Addressing the concluding session of the seminar, H. Wickliff Rose, co-ordinator of research and planning for Viscose, declared technical skill plays a most important part in the merchandising of rayon yarn. He emphasized the fact that his company believed in the technical basis of merchandising rayon. Mr. Rose also commented on the Pauley report and its recommendation regarding the rayon industries in Japan and Germany.

In a 6-to-1 decison, the United States Supreme Court has ruled that returning veterans are not entitled to "superseniority" in their old jobs. This ruling of the court reverses the interpretation of the Selective Service Act issued some time ago by Maj.-Gen. Lewis B. Hershey, director of Selective Service.

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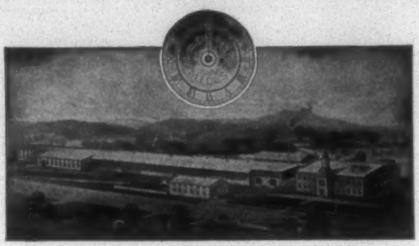

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Studies On the Cleaning of Cotton

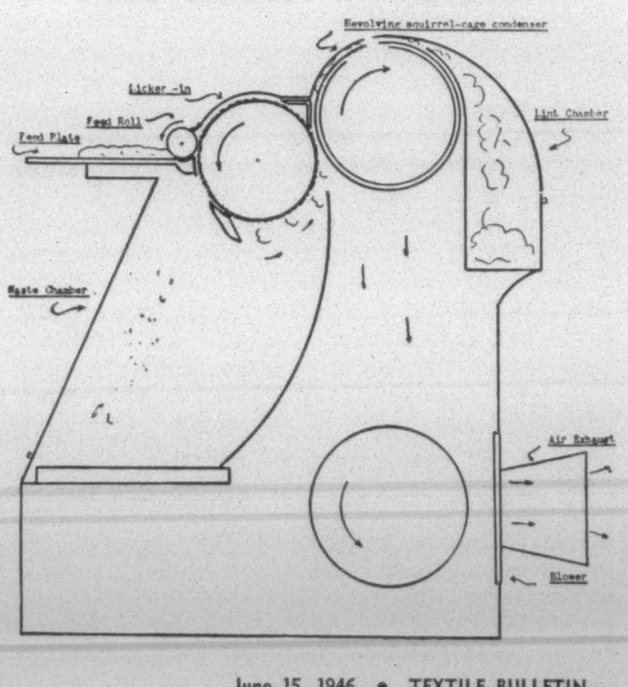
(Continued from Page 42) development of the principle.

The first result was the Shirley Analyzer, a remarkably efficient machine to separate lint and trash, measure trash content and weight grade (B. P. 404,686 of 12/7/32). This should eventually replace the present method by judging grade by mere appearance. It may be used to measure grade or cleanliness not only of baled cotton but of waste or cleaned stock, and to give this measure in proportions by weight so that the value of grade and of cleaning processes may be costed. The latest result is the simple modification of the card licker-in to improve cleaning and save lint (B. P. 567,499). These are very sound applications, definitely improving practice in their limited fields, without any radical change in mill organization.

Another early application was the Lint Recoverer, which is also a simple addition to existing equipment. The efficient recovery of the good cotton in waste does, however, allow for some beneficial change in the use of present opening machinery. When, as is usual, production is pushed up beyond the limits of the really effective action of a machine, the proportion of waste diminished but the machine does not do a good job of cleaning. The same happens if waste is saved by making the waste collection more conservative. Whenever, to increase production or to save waste, a machine is thus used with low efficiency, it not only leaves more for succeeding machines to do but it interferes with the action of these machines, by making small lumps or tufts which pass through them unbroken. Opening should be carried through in a few strong stages, without repetition of similar actions. It is better to put 250 pounds per hour through each of two pickers in parallel than to put 500 pounds per hour through both in succession. It makes a better job to get all the loosened trash out of the stock, even if the lint loss is increased. If then the full power of opening machines is utilized, there may be an increase in lint loss.

Should one try first to avoid lint loss and accept such

—THE SHIRLEY ANALYZER—



cleaning as one gets? Or, should one clean the cotton and accept the necessary lint loss? The competition of the pure fibers of chemical factories may force cotton manufacturers to the latter position. It would be much more tolerable if one could recover the lint easily from the waste. One may then think first of the efficient action of the machine, confident in the recovery of any lint going to waste. This recovery might be made in the picker itself, by incorporating the principle of streamline air flotation in the waste collection. This is the idea of the Pneuopener.

Besides separating trash from lint, the flotation of the opened lint in a streamlined air current arranges the fibers fairly regularly, doing in some degree the work of the card. This has led to work on a machine that would eliminate the card; the sliver lap machine also to work on fleeces, which may be bonded with theromplastic powders or fibers or coatings.

All this refers to work on cleaning the trashy product of the cotton fields, which farmers think is good enough for cotton spinners. They are used to it and take it for granted, but there must be many spinners who favor artificial staples on account of their 100 per cent purity. This is a challenge to cotton growers and some are wise enough to accept it and strive to produce a textile material 100 per cent pure. The place to do this is immediately after ginning, when the cotton is in a very open state, before the trash has been stuck to it by pressure and time.

This development is a common interest of Lancashire and the Cotton South. It is a cause in which the Shirley Institute is willing to contribute the results of a long and expensive research to the work of improving ginning in America, in co-operating with the United States Department of Agriculture and other interested bodies. For this reason, I talk more freely on this subejct than I normally would of unpublished work of the Shirley Institute, with the concurrence of the director who recently visited this country, partly to arrange such co-operation. The better marketing of raw cotton is one of the legs by which cotton may climb out of the pit that threatens it, the other being better design of fabrics for their purpose. It will never be saved by chipping cents off the cost of production, at the sacrifice of quality and real utility.

Techniques for the Inspection of Textiles

(Continued from Page 42) the depot to the contractor's plant in the field. It was found to be a physical impossibility to supply each inspector with the exact samples of the various tolerances established for the classification of defects. If he were supplied with such samples, it would not be long before their appearance would be changed due to handling.

While the early experimental charts containing swatches of the various defects and their tolerance limits were of some aid to depot inspection personnel as a means of identifying and classifying defects, this method proved of little or no value to Quartermaster Corps inspection personnel assigned to the inspection of contracts in the field or to contractor's inspection personnel, who were continually in a quandary as to what should or should not be strung.

The next attempt to classify the various textile defects and establish tolerance limits was made in the winter of 1943, when written descriptions were used. A series of tentative defects classification charts were developed and were incorporated into the handbooks for factory inspection and

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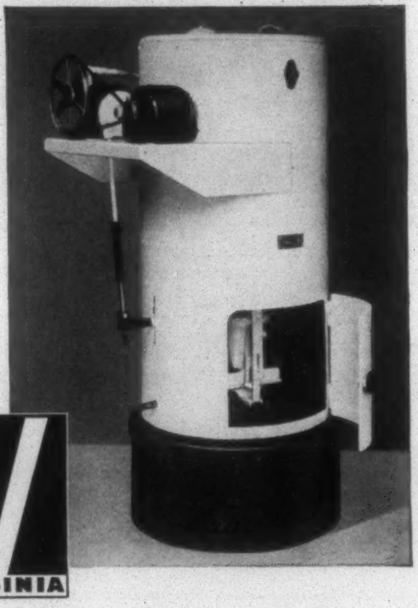

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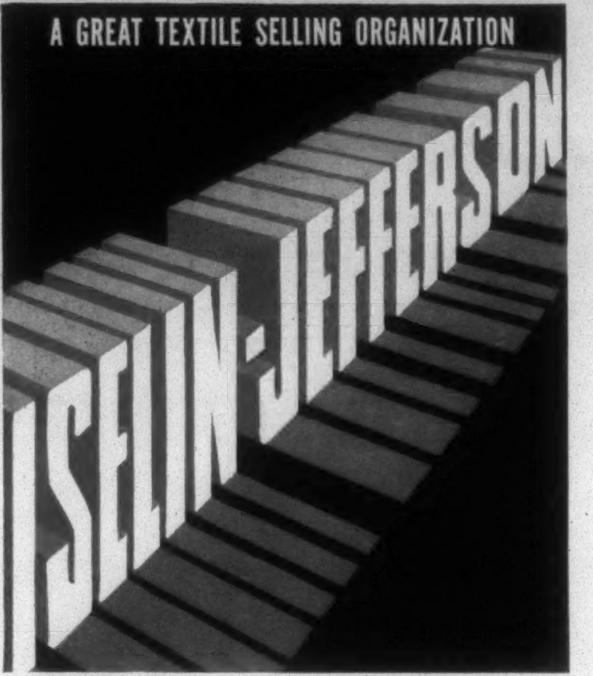
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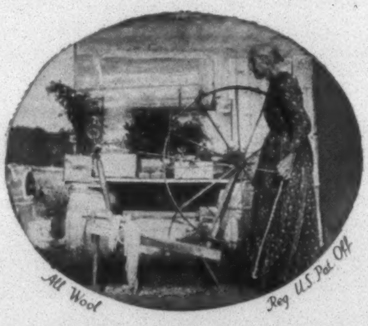

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acceptance of textiles. While this attempt to attack the problem was of some value, it was not entirely satisfactory. It was found to be exceedingly difficult to express in words the various gradations of the defects that should or should not be strung. In addition, the nomenclature adopted for use in identifying the various defects were not familiar to all of the contractors' inspection personnel. It was decided, however, to use this method until a better one could be found.

The search continued throughout the winter of 1943 and the spring of 1944 for a better method of describing defects and their tolerance limits. Experiments were conducted in color and in black-and-white photography, which are two dimensional. It was soon discovered that the cloth did not photograph as cloth, but showed only a flat surface, and looked much the same as wallpaper. While the defect could be identified, in some cases it could not be determined whether it was on the surface of the cloth or in it. While the photographs were exceptionally good, they were not satisfactory to the textile technologists. A careful study of the matter disclosed that ordinary photographs, while showing the general characteristics of the cloth, and defects, they had a tendency to exaggerate or minimize the degree of seriousness of the defect, due to lights and shadows. In addition, they appeared flat and lacked depth. In the case of finish, the photographs failed entirely to illustrate the defect.

Vectographs Provided the Answer

The results of the photographic experiments disclosed that some medium would have to be developed that would produce the effect of depth. In the fall of 1944, at the suggestion of Lieut.-Col. Albert E. Dennis, then officer-in-charge of the Philadelphia Inspection Zone, experiments were conducted with Vectographs (third dimensional pictures) which utilize the stereopticon effect to produce depth perception. This method was then in use by the Army Air Corps to determine the effectiveness of aerial bombing, etc. The results of these experiments disclosed that by the use of this method it was possible to identify the cloth as to type and also to determine the degree of seriousness of the defect.

The Vectographs, developed as a result of these experiments, are such exact duplicates of the defects that they can be used as samples of the defects instead of the actual cloth samples. Vectographs cannot be used for color matching because the process is limited to the sepia color and black-and-white. Nor can they reproduce the sensation of feel or handle. It is now possible, by employing Vectographs as visual inspection gauges, to establish a predetermined, uniform set of standards for the classification of textile defects. We can now make, from the same set of film, 2,000 Vectographs which will have the same standard to go by.

In order to promote uniformity of nomenclature and uniformity of the classification of textile defects, the Quartermaster Corps proposes to prepare sets of visual inspection gauges for the various fabrics or groups of fabrics which it procures. These visual inspection gauges will be made available for use by Quartermaster Corps inspectors as well as contractors' inspection personnel. Visual inspection gauges establish a definite standard, one standard for all mills.

It might be well, at this point, to discuss the various types of measuring and gauging instruments, and point out the differences between them. It is possible to measure the thickness and length, and to determine the weight of a piece of cloth, by the use of a micrometer, a rule, and a scale, but, it is not possible to measure quality by these means. Evaluating quality of textiles is usually determined by visual comparison with some established gauge or standard.

Vectographs are visual gauges which can be used to determine quality by comparison, but are limited to operations which can be gauged by the human eye. They are not measuring instruments, nor are they "cure-alls" for all inspection problems. Such characteristics as weight, texture, color and handle, etc., will have to be determined by other means. Generally two gauge points are illustrated by Vectographs, one to represent the limit of an irregularity below which the imperfection is not considered a defect, and above which the imperfection is considered a minor or major defect depending upon how bad it is. The other gauge point represents the limit of a minor defect, beyond which the imperfection becomes a major defect. A specimen is sometimes shown as an illustration of a major or minor defect.

The first phase of the visual inspection gauge program pertains to the securing of swatches of the various defects found during inspection of the fabrics procured by the Quartermaster Corps. To date over 6,000 samples have been catalogued. From these swatches will be selected the ones from which visual inspection gauges will be made. The detail and research work connected with the accumulation of the required material and samples will be carried out by technologists of the Quartermaster Corps quality control staff.

The second phase of the visual inspection gauge program pertains to the establishment of the various standards committees, who will carry on the work connected with the development or revision of the standards. Each committee will function in a prescribed field. A separate standards committee will be formed for each general class of material for which visual inspection gauges are to be made. That is, there will be a wool cloth standards committee, a cotton cloth standards committee, a nylon and rayon cloth standards committee, etc.

In order to expedite the program, when a range of samples for one fabric or group of fabrics is reasonably complete, individual members of the particular standards committee concerned will be contacted by technologists of the quality control staff, who will present the material under discussion. Each individual member will select the various samples which, in his opinion, should be used as the standard in preparing visual inspection gauges. After the individual members have been contacted, and their selections have been tabulated, a report will be rendered to the chairman of the standards committee at whose option a general meeting will be called.

Standards To Be Determined

The committee will review and approve the selections made, and will adopt them as tentative standards. Tentative standards will apply for a period of one year after which they will be reviewed by the committee for final adoption as the standard. Any action affecting standards taken by the committee at any meeting called for the purpose shall be subject to a two-thirds vote of those voting. Any negative action taken by the committee shall be accompanied by a

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All parts of the recorder which drive the platen, and the pulleys or slide guiding the platen, must move freely; use a few drops of light machine oil.

To verify elongation record obtained from the recorder: Return the clamps to normal starting position. Place a chart in the holder so that the pen indicates zero load and zero elongation. Measure the distance between the butts of the clamps (or some other bench mark) to the nearest 0.01", calling it Cn (normal clamp distance).

Test the location of the chart in the holder by operating the machine without any sample. The pen line should coincide with the chart axis showing zero load and variable elongation. If necessary, re-position chart to obtain this coincidence. Then, without any sample in the clamps, operate the tester to 1.0" elongation on the chart. Measure the distance between the bench marks, which should equal Cn plus the elongation on the chart. Repeat this at 2.0" and 3.0" on the chart. Any discrepancy between the recorded elongation and the actual increase in distance between the clamps is a recording error due to faulty chart spacing.

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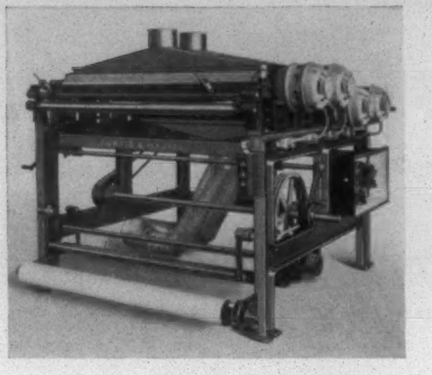

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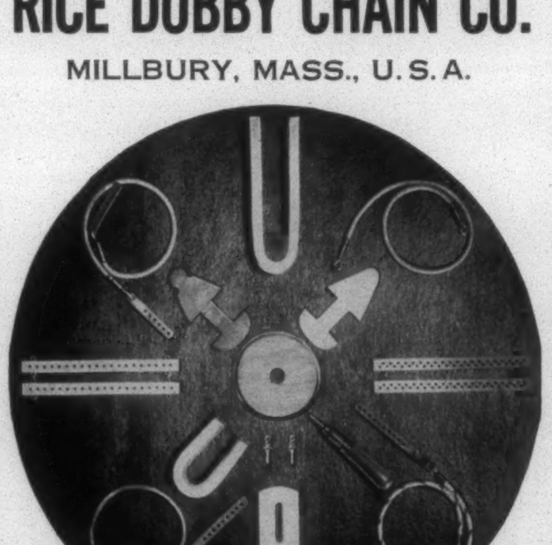

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statement giving the reasons for such action so that objections may receive the consideration of the technologists of the quality control staff.

All standards will be reviewed by each standards committee from time to time, and at least once in every five years in order that they will be in step with current technical developments. After the samples selected are approved by the standards committee, each swatch will be photographed and Vectograph prints made from which visual inspection gauges will be prepared.

In connection with the visual inspection gauge program, the Quartermaster Corps is making a study to determine the proper methods to be used in establishing standard testing procedures for use in testing inspectors for visual accuity, color and depth perception. Studies are also under way to determine what visual qualifications an inspector should have to satisfactorily perform a particular inspection job.

History of Vectographs

Back in 1833, Sir Charles Wheatstone discovered that if individual pictures (taken the normal pupillary distance apart) were made for each eye and were viewed through a special viewing device, so that the right eye would see the right eye picture and the left eye the left eye picture, visual perception of depth could be obtained. This basic principle is employed in all third dimensional pictures.

Back in the early 1900s, the familiar parlor stereoscope, a version of Sir David Brewster's instrument, designed by Dr. Oliver Wendell Holmes, was a familiar adornment of every well knick-knacked parlor. In it, paper prints of two stereograms, mounted on a card, are viewed through a pair of lens segments. This device is still capable of giving a great deal of pleasure. No one thought, at that time, that this basic method would be used in the inspection of textiles. There have been many methods and devices developed over the past 100 years to obtain the stereoscopic effect. The best of these, and the one used by the Quartermaster Corps for visual inspection gauges, is a method developed in 1936 by the Polaroid Corp. of Cambridge, Mass. This method employs the medium of light polarizing pictures which permits the viewing of both pictures on the same sheet of Vectograph film, without impairing the image quality.

In order to understand how the Vectograph works, it is necessary to discuss briefly the various methods of controlling light. Certain methods of controlling light have been known for centuries. For example, the problem of focusing light was solved many years ago by the use of lens. The prism has been used for a long time to change the direction of light—to make light turn corners, so to speak. Means have also been developed to control, to a small extent, the color of light by the use of color filters, and, to some extent, the brightness of light has been controlled.

But a long known characteristic that distinguished light from all other forms of energy, *polarization,* has never, until recently, been controlled except on a minute scale in well-equipped science laboratories. However, since 1936, the Polaroid Corp. has developed materials which have made this control now available on a large scale. These light-polarizing materials are used to control *direct and reflected glare,* to control *brightness,* and to *create* and control *colors,* as well as to create three-dimensional pictures.

The Vectograph makes use of a few perfectly straightforward facts about polarized light that physicists have recognized for years. When you look at a *perfect* light polarizer through another polarizer, it will appear black and opaque in the optical grain (vibration-direction) if the two are *crossed at right angles.* It will be clear and practically *invisible* if the "optical slots" of the two are lined up parallel to each other.

To visualize this phenomenon, regard each light ray as millions of tiny waves with crests vibrating in all directions like the illustration shown on the screen. The arrows indicate the direction of vibration of all the light waves that make up the ray, and the equal lengths of all the arrows symbolize equal proportions of light vibrating in each direction. Now, if we place a polarizing disc of filter in the path of this light and think of this disc as "optical slots" through which the light vibrations have to squeeze, only the vibrations parallel to the slots can pass completely. All other vibrations can be thought of as wholly shaved off and lost or partially squeezed through the slot. The light that passes through the disc is made up of waves vibrating in the same direction as the optical slots and is called *polarized* or *controlled* light. The direction of its vibration is the axis of polarization of the polarizing disc which is actually made up of optical slots invisible to the naked eye.

When two polarizing discs are placed in the path of the light ray with their slots (polarizing axis) parallel, light passes through. When one of the discs is turned, the intensity of the light is reduced. When they are crossed at right angles, the light is cut off. If we looked through the second disc onto the first disc it would appear black. Now, if the polarizer we are looking at is not perfect—if it is only polarizing part of the light—it will not appear black when our viewing polarizer is crossed with it, but it will appear gray. It will be darker or lighter as its degree of *polarization* is greater or less. It will still be invisible, nevertheless, if the viewing polarizer is lined up with it.

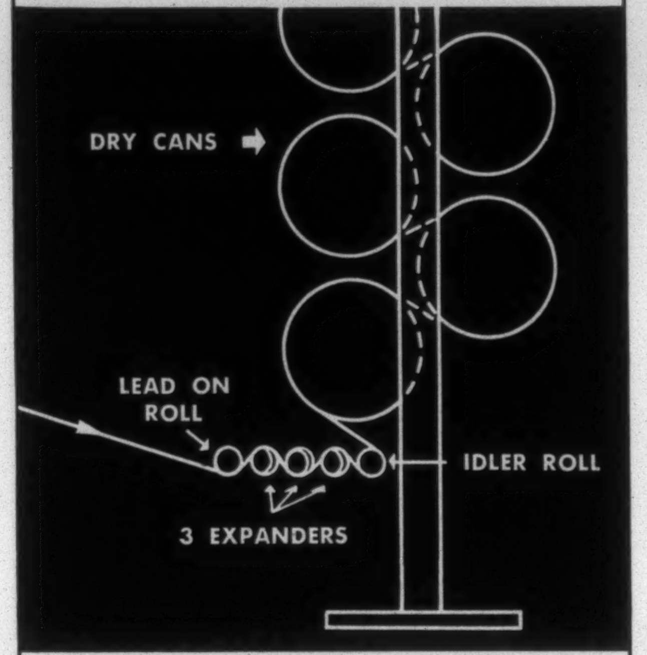
These facts are put to use in the Vectograph film in which the image is produced optically through the medium of polarized light. It is *not* an image made in any ordinary way from a deposit of pigment, a dye, particles of silver or other metals, such as are used in photography or color processes. The images are intrinsically *light*-polarizers.

The Vectograph film before processing looks very much like unexposed but developed and fixed photographic film. It is a transparent, completely non-polarizing, smooth-finish acetate sheet. Each surface of the film is composed of molecules which are oriented substantially parallel to one another and at 45 degrees to the edge of the sheet. The orientation axes of the molecules on the two surfaces are at right angles to one another. The molecules on each surface have the property of becoming polarized when treated with a special "printing solution." The degree of polarization of the oriented molecules is proportional to the amount of printing solution absorbed.

Creating the Picture

The Vectograph film has two sides, both actively engaged in producing the images. On each side of the film, the printing solution, used in processing the Vectographs, sets up an image in terms of polarization. The control of the *degree* of polarization determines the point-to-point density of the images of the film corresponding to the light portion of the original scene are polarized to a slight degree, while those areas corresponding to the dark portion are polarized

Mount Hope Free-Wheeling
EXPANDER



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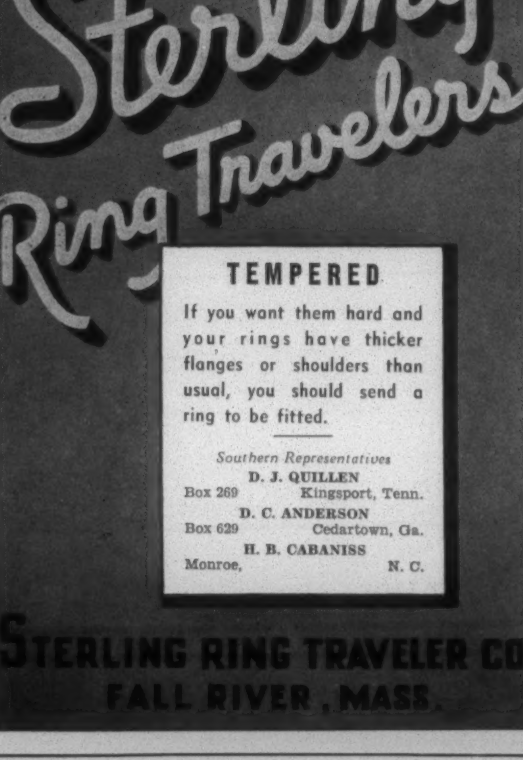

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to a high degree. This is what creates the pictures. To separate the pictures, one for each eye, something else has to be done. The images on the two sides of the acetate films are polarized in *different directions* at 90 degrees to each other—one 45 degrees to the *left* of vertical, and the other 45 degrees to the *right* of vertical.

When viewed through special viewers which have their polarizing lenses similarly arranged, with the axis of one lens at right angles to that of the other, the picture for each eye becomes discernible.

The image on the front of the Vectograph film appears in full contrast to the right eye because its vibration direction is crossed with the "optical slots" of the right eye piece. The left eye does not see the image on the front of the film because its vibrattion direction is parallel to the "optical slots" of the left eye piece, making the image on the front invisible. Therefore, the left eye sees right through the image on the front surface to the image on the back, which now becomes visible in full contrast to the left eye because its vibration direction is now crossed with the "optical slots" of the left eye piece. Through the special viewers the right eye sees the image on the front surface of the film, and the left eye the image on the back surface of the film. There is no conflict. Only one image is visible to each eye. The brain fuses the two images into a single three-dimensional impression.

It is most important that persons viewing these third dimensional pictures have normal and uniform vision. One bad eye would result in seeing only one of the images properly, and the perception of depth would be lost entirely. Ordinary photographs (two dimensions) reproduce the scene as one eye sees it; Vectographs (third dimensional pictures) reproduce the scene as we normally see it with two eyes.

Continuance of Set-Asides Is Predicted

Not only are cotton textile export set-asides planned for the third quarter, but it is "extremely possible they will be continued through the fourth quarter," Robert C. Turner, director of the bureau of international supply of the Civilian Production Administration, told members of the Commerce and Industry Association of New York recently. C. P. A. is now working on third-quarter percentage set-asides, Mr. Turner said. He added that percentages will approximate the second-quarter average, but he pointed out that the total for export in the third may not be as much as in the second quarter since production of cotton textiles is expected to decline somewhat. Mr. Turner's topic was "Post-war Exports Quotas," which he said had been much misunderstood.

Munson Named Head of Chemists Association

Charles S. Munson, chairman of the executive committee of U. S. Industrial Chemicals, Inc., was elected president of the Manufacturing Chemists Association of the United States at the association's annual meeting June 6 at Skytop, Pa. Mr. Munson succeeds H. L. Derby, president of American Cyanamid & Chemical Corp. Leonard T. Beale, president of Pennsylvania Salt Mfg. Co., Philadelphia, and H. O. C. Ingraham, vice-president of General Chemical Co., were elected vice-presidents. J. W. McLaughlin of Carbide & Carbon Chemicals Corp. was named treasurer and Warren N. Watson of Washington, D. C., was re-elected secretary.

Only Qualified Manufacturers To Get Set-Asides

Woolen fabrics set aside for the low-cost clothing program may be channeled only to manufacturers who have qualified for priority ratings under that program, according to the Civilian Production Administration. Manufacturers holding other priority ratings are eligible only for the "free goods," or materials left over after the set aside, C. P. A. said. This statement was designed to clear up any misunderstanding concerning the serving of ratings on wool fabrics. It refers specifically to Schedule K of Order M-328B (the low-cost clothing program) and to Priorities Regulation 28A (the bottleneck breaker). The statement follows:

CC ratings issued under Schedule K of M-328B to manufacturers are applicable to the set-aside as established by the mill or by the jobber. Apparel to be made therefrom, however, must be within the provisions of the schedule. (CC ratings may also be obtained for any components necessary to complete the apparel, but once against the provisions of the schedule apply.) Those manufacturers who apply for CC ratings outside the provisions of the schedule —that is, under PR-28A—may only apply that rating as against the "free goods" that either a mill or a jobber may have available. Under the provisions of Order M-328B, Schedule K, if the jobber uses a certification to obtain fabric, this fabric must be channeled to customers operating under Schedule K of M-328B. It is for this reason that manufacturers can expect to apply a rating received under PR-28A only to whatever free goods may be available.

The International Wool Secretariat has leased the second floor of the building at 201 East 57th Street, New York City, for ten years, to use as its headquarters in this country. The new headquarters will include a large salon for fashion shows and exhibits of wool textiles and a library of publications devoted to wool. Charles Mathieu, Jr., will be director of information at headquarters and Helen Harper, fashion director. Morton Savell is managing director.

The woolens and worsteds industry early this month was reported to have contributed more money to the ninth annual campaign of the Greater New York Fund than this field gave in the entire year of 1945. The fund's campaign committee canvassing the trade believed that the industry would reach its quota of $56,000, a 25 per cent increase over last year's gifts, by the close of the drive June 7.

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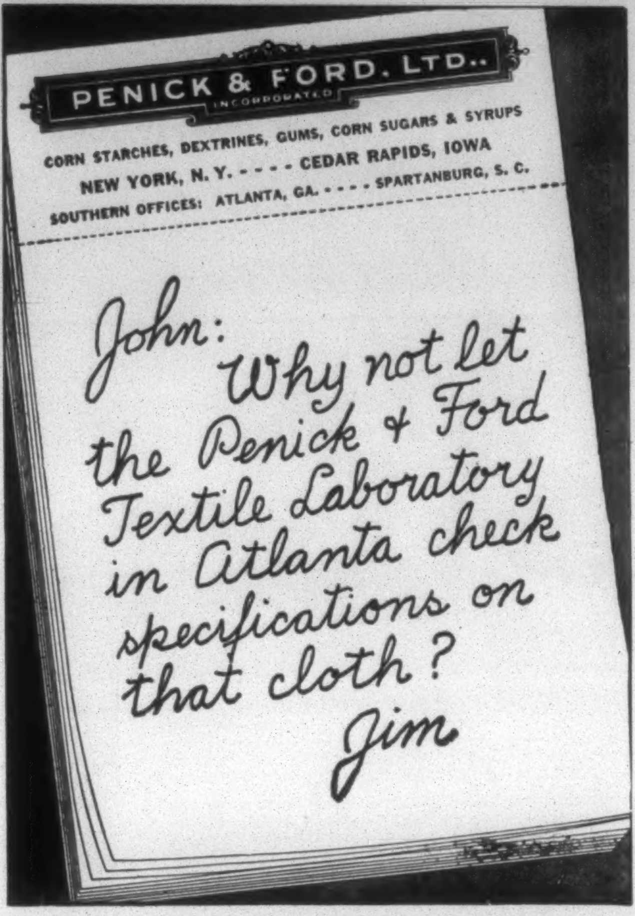
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May Viscose-Cupra Yarn Production Declines

As a result of the coal, rail, and other strikes during May, viscose-cupra yarn production declined five per cent from the April level, states *Rayon Organon,* published by the Textile Economics Bureau. Production rates for acetate yarn and for viscose and acetate staple fiber were not similarly effected. The decline in viscose-cupra yarn production was occasioned not only by coal shortages but also by drastically reduced receipts of caustic soda. In commenting on the June outlook, the publication points out that viscose-cupra yarn production will be determined by the availability of caustic soda and other raw material supplies and that, if caustic soda producers can get back into full production rapidly, the May losses in viscose-cupra yarn production may well be eliminated.

Despite the setback in viscose-cupra yarn production, total shipments of rayon to domestic consumers during May amounted to 72,400,000 pounds, or 1.4 per cent above the April level. This increase may be attributed to a six per cent reduction in rayon stocks held by producers, to one more working day in May than in April, and to a decline in exports. Domestic shipments of rayon for the first five months of 1946, together with percentage change from the same period one year ago, are as follows: viscose-cupra yarn 200,300,000 pounds, plus 12 per cent; acetate yarn 77,000,000 pounds, plus 11 per cent; and rayon staple fiber 74,800,000 pounds, plus nine per cent. At the end of May, producer-held stocks of rayon totaled 10,900,000 pounds as compared with 11,600,000 pounds at the end of April.

First quarter 1946 dollar value of rayon and synthetic exports were at an annual rate of $114,000,000, or 7½ times the value of exports in 1939. With the exception of a small decline in 1942, the annual dollar volume of rayon and synthetic exports has increased each year since 1939. In 1945 the dollar value of exports was 20 per cent above that of 1944 and nearly five times that of 1939. The expansion in rayon exports from 1941 through 1945 reflected primarily conditions arising out of the war. Many countries, especially the Latin American countries, were cut off from the former rayon suppliers with the result that critical shortages developed. These shortages were alleviated to some extent by the institution of a United States export program, in force through last September.

But in spite of the termination of the compulsory export program, the trend of United States rayon exports has continued upward, as indicated by the first quarter 1946 data. The current poundage equivalent of rayon and products exports is at an annual rate of 70,000,000 pounds. First quarter 1946 exports of rayon in all forms amounted to about eight per cent of domestic production of rayon filament yarn, staple fiber and waste during that period. The principal wartime export expansion took place in raw materials and semi-manufactured goods. Currently there has been a further increase in exports of semi-manufactured

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goods (woven and knit piece goods) and a large increase in fabricated goods (apparel and related products) exports. First quarter 1946 exports of rayon broad woven piece goods approximated 4½ of the domestic production of rayon broad woven goods in the same period. Exports of most rayon fabricated goods in the first quarter have increased substantially and are at rates far above previous years. Since 1945 there has been a sharp increase in the exports of rayon tire yarn, cord and fabric; the current rate of rayon tire yarn plus rayon tire fabric exports represents about eight per cent of the domestic production of rayon tire yarn.

Rayon Linings Given Incentive Price Increase

A ten per cent incentive price increase on all production of certain types of rayon linings suitable for men's wear, in exchange for an industry agreement to increase production goals in the third and fourth quarters of 1946, has been offered to the rayon lining industry by the Office of Price Administration and the Civilian Production Administration. This program was discussed at a joint conference of the industry and government representatives. The rayon representatives received the plan favorably, and submitted third and fourth quarter production estimates to be used as a basis for establishing new production goals.

While the estimates for July-December output of 88-140 sley rayon twills and serges (the materials now being used as linings for most men's suits) indicated a possible deficit as compared to C. P. A.'s goal, hope was expressed that the members of the industry would be able to increase their original estimates. Formal commitments on the part of each mill will be submitted to C. P. A. in the near future. On the basis of these commitments it will be decided whether the revision in the incentive price program will be made.

The new plan involves a change in O. P. A.'s rayon fabric maximum price regulation and in Direction 30 to Order M-328. These regulations, which have been in effect during the first six months of this year, grant a ten per cent incentive price increase on each yard of rayon twills and serges (88 to 140 sley) produced in excess of the total production reach in the third quarter of 1945. Philip F. Maguire, deputy administrator of C. P. A., said, "This plan has been an unqualified success. It has doubled rayon lining production." However, C. P. A. said even this high production will not provide enough rayon lining fabric to reach C. P. A.'s goal of 6,500,000 suits for the third quarter.

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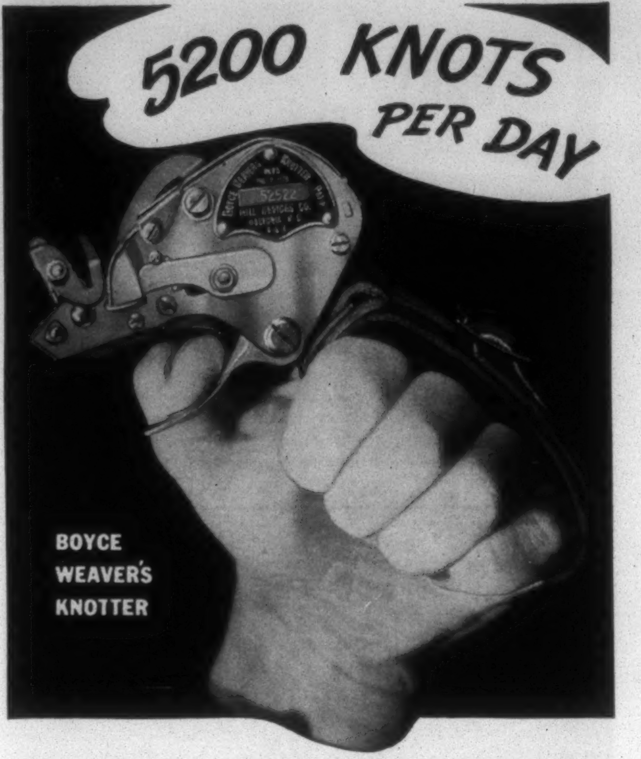

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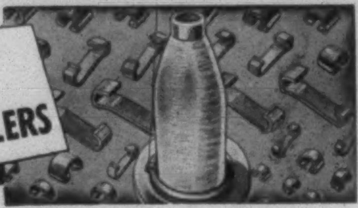

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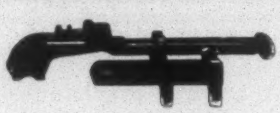

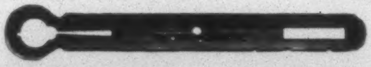

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Export Chief Defends Premiums and Set-Asides

The future of the textile export trade is dependent upon the continuance of the current specific O. P. A. premium and the maintenance of C. P. A. set-asides, according to N. S. W. Vanderhoef, left, president of the Textile Export Association of the United States. In a statement made June 7 in answer to market reports that both are threatened with revision or extinction, Mr. Vanderhoef declared that any changes in either of them at this time would constitute a blow from which the trade and the industries it serves would never recover.

"American textile prices are the lowest in world markets at present and most of the smaller nations who were closely allied with us in the war effort are dependent upon us for supplies," he declared. "Our neighbors in Central and South America and the Philippines are getting only about one-third of their normal requirements and removal or revision of premiums and set-asides at this time would reduce even the subsistence amounts that we are allowed to ship to these markets."

In defense of the premium on export sales, he stated that it barely covers the costs of conducting an export business at this time. Rents, wages, paper and all other overhead costs have increased greatly in the last five years as well as cable rates, with the result that export operating expenses have risen sharply, he declared. In many instances, he said, experienced agents in foreign markets are asking and getting more money for their services than ever before. Competing nations, he emphasized, have no price controls on export shipments. He scored reports that premiums are responsible for the diversion of goods from the domestic market, pointing out that shipments are rigidly allocated through a Federal licensing provision. As a matter of record, he said, export shipments have constantly lagged behind the amounts promised foreign markets. He added, "Instead of contemplating revisions in premiums, O. P. A. should be seriously considering an increase in the rate."

As for C. P. A. set-asides, he said, they were established in order to carry out the promises made to other nations by the United States Government. They are based on the minimum textile subsistence needs of friendly, co-operative nations and their removal or reduction would not only cause untold hardships, but would seriously disrupt cordial trade relations built up over a number of years.

60-Day Inventory Controls Are Proposed

A proposal to install 60-day inventory controls over high tenacity rayon yarn, cord and cord fabric in the hands of rubber manufacturers was made to the high tenacity rayon producers industry advisory committee recently by the rub-

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ber division of the Civilian Production Administration. The committee unanimously approved the proposal. High tenacity rayon is an especially strong, coarse and heavy type of rayon that has been developed principally for use in tires.

C. P. A. officials cited evidence of maldistribution of high tenacity rayon in the hands of rubber manufacturers today. As a result of this situation, they said, some companies cannot make all the tires they are now permitted to make with rayon cord under the pattern established by List 15 of Appendix 2 of Rubber Order R1. At the same time, other companies have more rayon than they need. To correct this situation the C. P. A. rubber division proposed that the inventory any one company can hold be restricted to not more than 60 days' supply, based on its current restricted production pattern. It is contemplated that by July 1 the proposed new control will take effect.

P. T. I. Seminar To Attract Industry Leaders

Men of national prominence in the field of industry and labor will assemble in Hershey, Pa., for the first national seminar to be held July 8-12, sponsored by the Philadelphia Textile Institute. The seminar has been arranged to give leaders of the textile industry the medium by which to discuss broad aspects of business and related problems in the textile field. Leading the list of nationally known figures are Charles F. Kettering, vice-president of General Motors Corp., Clinton S. Golden, assistant to Phillip Murray, president of the United Steel Workers, and Brig.-Gen. William H. Middleswart from the Office of the Quartermaster General.

Representatives from all parts of the country will attend the seminar, it was announced by J. Marshall Cole, Yardley, Pa., chairman of the seminar committee. From the South will come Hugh M. Comer, president of the Avondale Mills, and Harrison Hightower, president of the Thomaston Cotton Mills, to present papers on various aspects of the industry. Prof. J. A. Hill, dean of the Wyoming Agriculture College, will present a discussion of wool fibers. Specialized aspects of the industry will be discussed by Meyer Kestnbaum, Chicago, president of Hart, Shaffner & Marx, Col. C. F. H. Johnson, president of the Botany Worsted Mills, and Elmer Ward, president of Goodall-Sanford, Inc. Many other leaders of the industry will take part in the discussions which are under the general chairmanship of M. Earl Heard of West Point, Ga.

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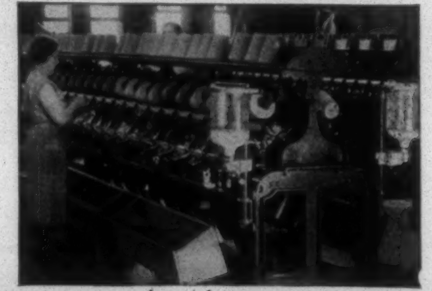

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Cotton Goods Market

All looms which were weaving gem duck on March 8, 1946, must continue or resume production of that material immediately, the Civilian Production Administration ordered June 14. This action was taken by an amendment to Order L-19, the loom-freeze order. It was designed to insure adequate production of gem duck, an important material used in the lining of shoes.

The amendment also ordered that all looms weaving carded poplins (sheeting yarns) confine production to materials ranging from 3.75 yards per pound to 2.50 yards per pound. This step frees looms which have been making heavy poplins so that they can make lighter materials—coutil and batiste—for the corset industry. Both parts of the amendment provide that the order need not become effective for 30 days if a change of pick or sley is necessary, or 45 days if a change of yarn number is required.

Many mills went off these goods before March 8, Worth Street circles report, and C. P. A. made a mistake in not dating its amendment earlier. The shoe industry has been in tight supply on these fabrics for some time now, it is explained in the gray goods market, and it is understood that shoe manufacturers have been trying to get some sort of aid for a considerable period now, as previously reported in these columns. Selling house executives are pessimistic over the chances of this change in L-99 helping much in the supply of gem ducks for the shoe makers.

The great majority of cotton mills are now sold up through the second quarter and the day-to-day activity that has characterized the gray goods market during the past few weeks is expected by observers to drop off. Not until the Congress decides the future of price controls and the market sees third quarter distribution regulations, will any more goods move, it is said.

Scattered spot sales of fine goods continued to be the only activity reported from Worth Street as the market awaited news as to O. P. A. disposition. Pending knowledge of the future of the pricing agency, the combed cloth men declared that early issuance of M-317A would be an aid to more goods being released. These men point out that with the set-asides known, mills can plan future production and converters and mills can draw up selling schedules.

Third quarter selling was expected in the last week of June, but only for 30 days in advance on the combed specialties and hand to mouth as far as gray goods were concerned. No matter what happens to the pricing agency, nothing can be done until the third quarter set-asides are made known. There was considerable hope that C. P. A. would issue the regulation prior to the beginning of the third quarter so that houses could make selling schedules.

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Cotton Yarns Market

Complaints are still heard that some spinners find it difficult to add new personnel to mill working forces with the result that such producers are running below capacity. This indicates that while improvement has been reported since the first of the year in attracting workers back to the mills as reported by some spinning establishments, the problem still prevails in certain quarters.

Cotton textile regulations have been amended to re-define the eligibility of producers to charge the higher band of prices for their products. Under a previous provision a producer, who had not qualified before March 8 for the higher band, can charge Band A prices if he is now paying a wage rate 12½ per cent higher than the level that would have qualified him. The present amendment specifies that producers who may have qualified, but did not charge, the original higher band may use the same test to determine their Band A eligibility.

Complaints about quality and services are used by several yarn dealers to judge just how badly buyers need sale yarn at present. Several yarn distributors admit they have encountered cases where the buyer had legitimate complaints, but refused to press them with the spinner concerned. Where yarn consumers remain silent it is a clear indication to the seller that the account is desperately in need of the yarn he is receiving and fears a complaint may close his source of supply. Market sources contacted make it quite clear that they are willing to pass on any murmurs of dissatisfaction, and, where legitimate, it is believed these will be received without stirring up much trouble. "It is a ticklish subject," one yarn supplier admitted. Yarn dealers catering to the carpet trade report that such accounts are resting a bit easier since the announcement of a reduction in the set-aside of such yarn.

A portion of the blame for current distribution ills of the sale yarn industry is attributed by several yarn spokesmen to "greedy" buying, panic buying and speculative buying. More and more attention seems to be directed at yarn users of the "greed" buying category. Careful observation by some yarn sellers reveals that in quite a few cases, sale yarn consumers are demanding more yarn than they received during individual peak production months. While acknowledgement is made of the need for increased production, the feeling is expressed that some buyers are going profit-wild during these days of shortages.

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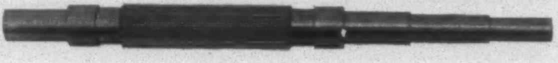

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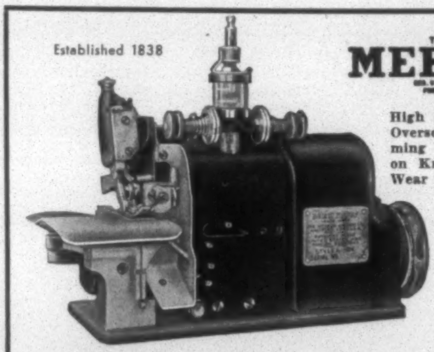

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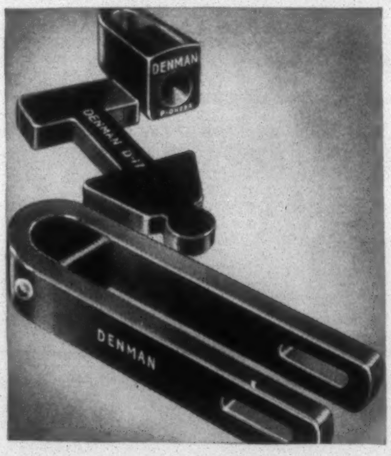

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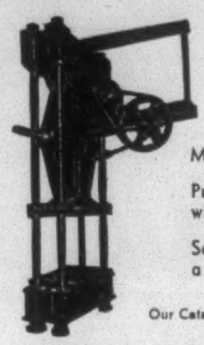

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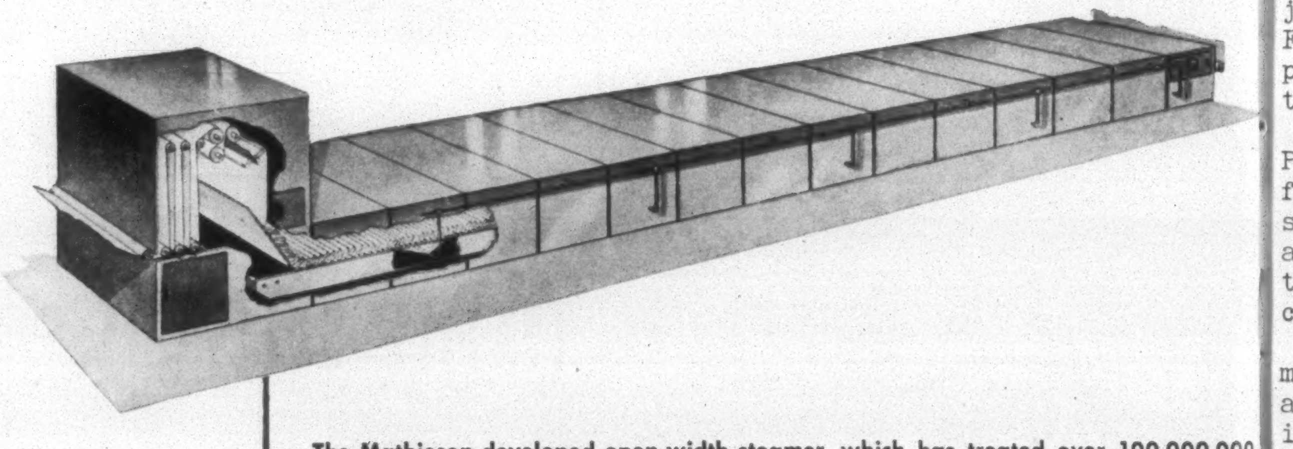

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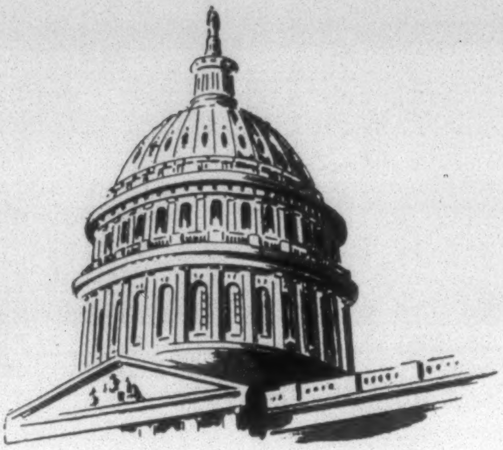

[Exclusive and Timely News from the Nation's Capital]

THE PRESIDENT DECIDED TO CAST HIS LOT WITH LABOR, veto the Case Bill, and trust to luck that his action would not alienate the millions of unorganized, independent voters and cost him the election in 1946 and 1948. In the veto he swung from one extreme to the other, in a remarkable demonstration of inconsistency, grasping blindly at expedients to retain a grip on labor for political purposes. Labor's show of resentment to his sudden, short-lived determination before Congress to deal effectively with strikes sent shivers down the Administration's political spine. Wallace, Byrnes, Hannegan and Vinson joined to persuade him to veto the Case Bill to regain labor's favor. For six days he wobbled and back-tracked, then succumbed. Salient parts of the veto paraphrase almost word for word the protest against the bill filed by C.I.O.'s Philip Murray.

Southern senators, led by the veteran George, counseled the President to criticize the Case Bill in any way he liked, but not to further widen his rift with Congress by a veto. Serious repercussions, they said, would follow. Hannegan, Wallace and Schwellenbach argued the labor vote is essential to success in the November election, and a veto would swing all of organized labor behind the party candidates. Their counsel prevailed.

Wages directly lost by workers in strikes in 1946 are estimated at over $1 billion, with no calculation of loss to indirectly affected workers. The aggregate wage loss more than offsets all wage increases, with professional, farm and white collar workers taking a heavy wage cut through rising prices. A total of 113,305,000 man-days of work have been lost in strikes. It sums up in the loss of 113,000,000 tons of bituminous coal, 11,400,000 tons of steel, 3,150,000,000 board feet of lumber, 2,900,000 new automobiles and trucks, 1,000,000 refrigerators, 95,000 electric ranges, and an estimated 98,000 new dwellings, with no estimate of the dollar value of the lost production.

A straight 65-cent minimum wage is being reported to the House by its Labor Committee. The bill does not contain the Pace farm parity proposal, but if called for passage this provision will probably be inserted on the floor. The committee refused to report the original 65 to 75-cent proposal.

John Snyder, capable and a talented financier, is expected to give a conservative and highly constructive administration to the Treasury. He's democratic and approachable, but business-like and a sound economist. He'll resist deficit spending and pump priming, and seek a balanced budget and a reduction in the public debt. He was named in preference to Under Secretary Gardner because of C.I.O. pressure not to give top Cabinet rank to a Southerner.

The President is wishing hopefully for a sudden burst of production and prosperity to wash out economic irritants before November, solving his labor problems and smoothing his path.

(Over)

Thousands of tailored suits and other thousands of well made travel coats for women, worth millions of dollars, and made of the highest quality light tweeds, worsted and woolens, are on British piers awaiting shipment to the United States, according to trade advices. American ideas in style and fittings are being combined with British tailoring for sharpest British invasion of the American market in history. Goods shortages and strikes are opening the doors.

The War Department will ship 165,000 bales of American cotton to its occupied zone to supply German textile mills with needed raw material for operation. Sixty per cent of the output will be turned over to the United States Commercial Co., for sale outside of Germany, and 40 per cent will be retained by German mills, as a processing fee, for disposal in Germany.

There's an even chance that the Selective Service Act will expire on July 1. Only the Army wants it continued; the Navy and Air Forces say they do not need it. Opposition to extension is growing in both the Senate and the House notwithstanding strong Administration pressure for one more year.

Control of the House in the next Congress is veiled in uncertainty. Apathy among voters in primary elections is the most pronounced in many years, but shows a minute drift from the majority party. Strong adverse reations expected from strikes, lack of housing and price controls is not evident in the voting.

Increase in freight rates averaging about ten per cent is a probable outcome in the petition filed by the carriers with the I.C.C. for a 25 per cent increase. Recent wage increases with decline in the war level of traffic is asserted to be cutting heavily into revenues and will prevent some roads from replacing worn out equipment.

Treasury expects wage and salary income of individuals to rise moderately into early next year, with a corresponding increase in spending. The annual rate of money income now is $157 billion, with spending at about $120 billion. But the spending rate is expected to reach about $163 billion a year when durable goods, including automobiles, become available.

Textile mill workers benefited in April from the largest percentage increase in hourly earnings since 1939. Actual earnings, at an average of 85.8 cents per hour, were 86.5 per cent over 1939.

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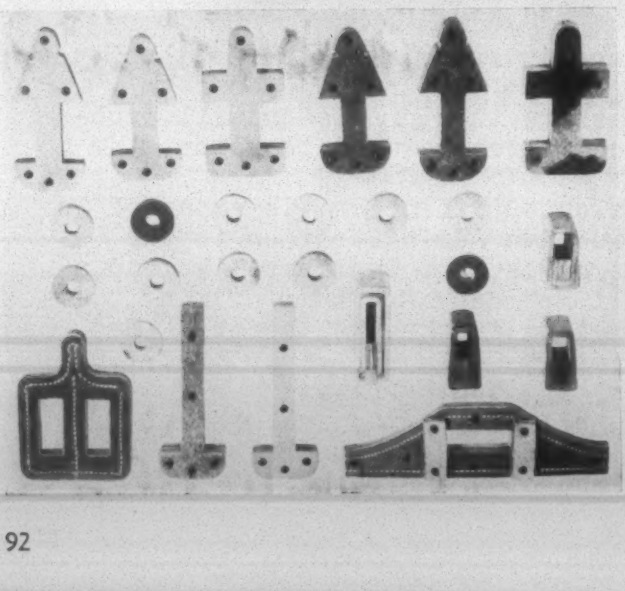

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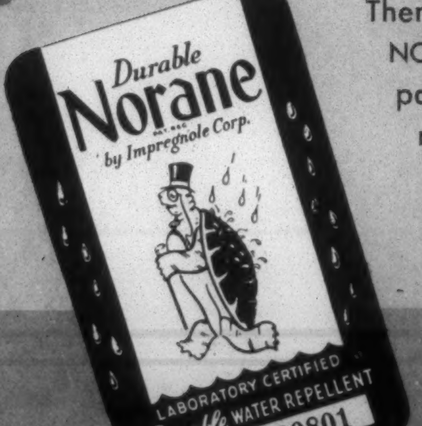

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